THE AMERICAN FARMER.

"O FORTUNATOS NIMIUM SUA SI BONA NORINT
"AGRICOLAS." . . . . . *Virg.*

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PLASTER AND GUANO—MODE OF APPLICATION—BENEFIT OF DEEP AND SUBSOIL PLOUGHING—CHARCOAL AS MANURE—BONE-DUST AS MANURE, ITS RELATIVE VALUE COMPARED WITH GUANO—COMPARATIVE VALUE OF LIME AND ASHES, &c.

To the Editor of the American Farmer.

MR. EDITOR:—I am a subscriber to your valuable paper, and have the highest respect for its merits and of the benefits it confers upon the country. Presuming upon this, I take the liberty of begging the favor of information from you upon some points of interest to myself, and doubtless to the public also. I am sorry to say I have no information to communicate to you—knowing as I do, that one source of the value of your magazine is in the facts communicated through its medium by practical men. For some time past I have been an attentive peruser of the Farmer; I expect its monthly visits with impatience, and receive them with pleasure.

The warm discussion between T. S. P. and yourself on the *plaster* and *guano* subject, was both interesting and amusing, and I am almost sorry it is over. The use of plaster for the purpose of fixing the ammonia in stable manure, &c., I have seen recommended in the "British Husbandry," an authority of the highest character, and Professors Norton, Higgins, and yourself—unquestionably high authority on that side—unequivocally advocate it. There is, however, it would seem, no combination of the sulp. acid and ammonia where there is no moisture present, for you may mix dry guano and dry plaster together, and let them remain for weeks, and the ammoniacal smell (the proof of non-combination) will be as perceptible and as strong as ever, apparently. (a) But moisten the mixture with water, and apparently the union at once takes place, for the smell disappears; nevertheless I am a firm believer in the merits of the mixture, and always use it. I have used it on turnips, the mixture having a decided effect, as decided as that following any application of guano I ever saw. Several farmers of my acquaintance use the mixture of guano and plaster, and stable manure and plaster habitually, like myself, and one told me he used it half and half, producing the most marked effect on wheat, and that a neighbor of his had used it in the same proportion with the same effect—the usual surprising effect of guano. For myself, I used some $400 worth of guano on wheat this fall, the whole of it mixed with plaster. I have no fears, because though the plaster and guano may not unite in a state of dry powder, yet the *moisture in the ground*, after the sowing, will cause the union to take place. I believe, however, that the effect of the mixture will not be so vigorous, on the first crop, as guano by itself—the plaster husbanding the ammonia for the succeeding crops, upon which the mixture (if the theory be correct) will have more effect than guano unmixed, that being exhausted by the first crop. Liebig recommends the use of plaster in making composts with night soil, and with what object, pray, unless it unites with the gaseous ingredients, which it does, as is proved by the scent being destroyed. The public, no doubt, as well as myself, would be pleased to hear more from you on this subject.

The enquiries I wished to put are the following, which if it will not annoy you, I should be glad to have answered.

First.—Mr. Ruffin, in one of his essays for the Farmer, (I forget which) says he does not plough his corn land in the fall, for wheat, with a four-horse plough, but with a two-horse, and promises to prove the latter to be the best mode. So far as I know, he has never fulfilled his promise. Will he do it? as the subject is interesting and important, more so when connected with him.

2d. What is the best mode of using guano for wheat where you plough with a four-horse plough? Should it be ploughed under or harrowed in with the seed? If there be other better modes of application, what are they? and of these two named, which is the best, where you must do either?

3d. What have been the results of the application of powdered coal, recommended so strongly and ably in your essay on the subject, which made a convert of me? So valuable a discovery—if discovery it be—should not sink into oblivion and be forever damned.

4th. What would you consider the best depth to plough for corn—supposing you subsoil—the best depth to be reached by both ploughs combined? And which is the best, where the *soil* is *deep*, to subsoil or trench plough, and with what sized plough would you do either, or both?

5th. What is the best quantity and mode to use bone-dust, (bones finely broken)? 10, 15 or 20 bushels? ploughed under or harrowed in? should they undergo a heat by bulking before using them? and

if so, would they be injured by being bulked and so standing for several months, heating, of course, in the interim?

6th. What do you think is the relative value of sixty (60) bushels of shell lime to the acre, or one hundred (100) of soap-boilers' ashes to the acre? which is the best? and which is best, soap ashes, where wood ashes are used, or where soda is used and no wood ashes?

7th. Would you prefer ten (10) bushels bone dust (finely broken bones, unboiled) to the acre, or 200 pounds Peruvian guano to the same?

8th. Do you think more than a bushel of plaster to the acre on clover, in the spring, is of material advantage, and will plaster on wheat in the fall be of service to the wheat? also, will it pay to plaster clover after the first cutting?

9th. What do you think of sowing clover seed with wheat in the fall?

You see, Mr. Farmer, I am particular, and curious, and avaricious of your knowledge; so much so, that I fear you will not take the trouble to answer my pestering enquiries. If, however, you will, I shall be truly grateful, and you will confer a great favor upon an already most grateful

Virginia, Dec. 21, 1851. SUBSCRIBER.

Notes by the Editor of the American Farmer.

a. Our correspondent, we think, is certainly in error about there being *no* combination between dry plaster and the ammonia of guano; the fact which he states in proof of his opinion, is inconclusive. The sulphuric acid of the plaster, can only unite with the already formed carbonate of ammonia that may be present in the guano, and as the other ammoniacal salts, which abound in guano, are always undergoing the process of decomposition, and assuming the form of carbonate, and as such competent to be volatilized, and throw off its fumes, the fact of the smell being present to the senses, may be referred rather to the re-supply thus furnished, than to the fact of "non-combination;" for wherever there may be heat and moisture,—both of which are to be found in our climate,—these transformations will be continuous, until all the different ammoniacal salts are expended. That the presence of *moisture* in the two substances, is more promotive of the decomposition of *plaster* and *guano*, and of their consequent union, than when it may be absent, we have never entertained the slightest doubt; for decomposition can only be superinduced through the conditions of heat and moisture; but however *apparently* dry plaster and guano may be, unless artificial means be used to expel the moisture, there is always sufficient humidity in our atmosphere, to carry forward a moderate degree of decay, and convert bodies susceptible of forming it, into the carbonate of ammonia. That our views are correct, we think our correspondent will admit, after he shall have read the communication of our correspondent G. which will be found in this day's journal. But if they were not so, the *mode* in which we have recommended plaster and guano to be used, would have obviated all difficulty; for once ploughed, or even harrowed in, well mixed together, the necessary conditions of heat and moisture, would be found in the earth, as well as in the rains, to produce decomposition, and as consequent results, union, and the formation of the sulphate of ammonia, an involatile, though soluble salt,—and being soluble, and conservative, at the same time, we cannot conceive, how it should act with less vigor than it would, were the ammonia to remain unfixed, as in the carbonate form, in which form it would be liable to loss by exhalation.

1. The solution of the *first* question we shall leave to the distinguished gentleman to whom it refers.

2. We shall answer this question, in part, by stating a fact. The roots of the wheat plant have been traced 4 feet below the surface of the soil; and the inference, therefore, is, that a four-horse plough could not bury the *guano* and *plaster* beyond the depth at which they could find them. But it might, perhaps, be safest, in view of prompt action where the soil is ploughed with a four horse plough, if the depth reached is more than 8 inches, to harrow the guano and plaster, instead of ploughing it in. If the mixture be properly effected, we should not apprehend much danger from loss by evaporation. But, to make assurance doubly sure, where the guano was to be harrowed in, we would add to the plaster to be used, in the proportion of half a bushel of salt to every hundred pounds of guano. From the promptness with which salt when submitted to moisture, decomposes, its muriatic acid would unite directly with the ammonia of the guano, form the muriate of ammonia—an involatile salt—and thus preserve it from loss by evaporation, while the plaster, being more tardy in decomposition, would act as a healthful reserve, to attract, by its sulphuric acid, at intervals, the escaping ammonia, unite with it, form the sulphate of ammonia, and perform a similar service as does the muriatic acid of the salt.

3. Pulverized charcoal has been freely used in Europe, with the best results. When *dry*, 1 lb. charcoal is competent to absorb, condense and retain 90 lbs. of nitrogenous gases—these gases by the first rain are washed out, find their way into the soil, where they are seized upon by the roots of the plants; the charcoal remains, to re-absorb other gases, give them out as food to the plants, as before stated, and thus keeps up a continuous action favorable to vegetable growth. Charcoal has other substances, essential to the life of plants within its body, besides carbon, which are washed out, and exert their influence in building up the vegetable structure and its fruits. If it be, as contended, indestructible—and we believe it is only comparatively so,—and it only acted as a condenser of ammonia and carbonic acid, and assimilated with *oxygen*, its offices in this respect would exert a most friendly effect in promoting vegetable life, by catering for these three essential gases, and holding them in store for the plants. *Liebig*, who among many other chemists, maintains its indestructibility, says:

"Charcoal is the most "indifferent" and most unchangeable substance known; it may be kept for centuries without a change, and is therefore not subject to decomposition. The only substances which it can yield to plants are some salts which it contains, amongst which is silicate of potash. It is known, however, to possess the power of condensing gases within its pores, and particularly carbonic acid. And it is by virtue of this power that the roots of plants are supplied in charcoal exactly as in humus, with an atmosphere of carbonic acid and air, which is received as quickly as it is abstracted."

Again, he says:—

"Charcoal in a *state of powder* must be consid-

ered as a very powerful means of promoting the growth of plants on heavy soils, and particularly on such as consist of argillaceous earth."

It will be perceived here, that though denying its destructibility, Liebig imputes to it active powers, and admits, that the salts it contains, independent of the carbon, will be separated from it and given up to the plants, and that "*charcoal in a state of powder must be considered as a very powerful means of promoting the growth of plants.*" This is high authority, for the meliorating power of charcoal, and we hold it to be unimportant, whether its action be *direct*, or *indirect*, if it acts as a powerful means in promoting the growth of plants, its office, be what it may, is equally salutary—equally beneficial, and its powers for good, must be admitted. But we are not so sure, that if charcoal—or, indeed, any other coal, be reduced to an *impalpable powder*, that it is not within the competency of the roots of plants—through their voltaic action—so far excite the substance as to extract food directly from it, independent of that which it may have obtained through its powers of condensing, assimilating, and liberating the before enumerated gases.

Professor *Rogers*, in his excellent work on "*Scientific Agriculture*," in speaking of *Charcoal*, as a manure, uses this language:—

"*Charcoal*, on account of its power of absorbing gases and destroying offensive odors, is a valuable addition to the soil: its operation as manure is not so direct as some other manures; that is, it is not so useful on account of any element which it furnishes to plants, as by the intermediate office which it performs, of absorbing and retaining in the soil those volatile matters which plants require, and which would otherwise escape and be lost. It is beneficial as a top-dressing, and as an ingredient in composts: it evolves carbonic acid in its *decomposition*, and is in this way *directly* useful to plants. Its powerful antiseptic properties render it very useful to young and tender plants, by keeping the soil free of putrifying substances, which would otherwise destroy their spongioles and prevent their growth."

But apart from theory, its practical results in France, have shown, that it is a powerful means of promoting the growth of vegetables—excellent crops of wheat have been grown, where no other manure was used. In England wherever used, its benefits have been made manifest. We, ourself, have used the refuse coak of the gas house, made from bituminous coal, upon red clay soil with the happiest and most marked effects.

We think with our correspondent, that it is to be regretted that the application of this substance should not have been resorted to; though, we confess we are not surprised; for it is a difficult matter to get agriculturists out of the track of their grandsires; for we recollect, that, in 1835, we were the subject of secret jest among our neighbors—who made themselves merry over our *folly* for using *lime* as one of the means for improving a worn-out soil—and a most important one it proved. We heard of their jests at the time, but as we thought we knew what we were about, we permitted them to laugh on and be merry.

4. We would plough 8 inches deep, and subsoil 8 more, for corn, provided the soil was not *wet*. If wet, we would drain instead of subsoiling, and subsoil a year after we had drained. We would not trench-plough, as that would turn up too much subsoil, unless our stock of manure was superabundant, and we were prepared to *manure heavily* and top-dress with lime. Gradual deepening of the soil, say to the extent of 2 inches at a time, we think quite the safest plan. *Sub-soiling*, and trench-ploughing, are very different things. The first loosens and pulverizes the soil below the surface plough line, but it brings nothing to the surface. By its pulverizing and opening power, it admits the rain and air into the subsoil, enables the first to dissolve and pass off poisonous oxides, and the latter, by its vivifying action, to infuse new life into the subsoil. While the trench-plough brings these poisonous oxides to the surface, there, by contact, and the process of percolation, to destroy the roots of plants. Almost every plant that grows, is the better of having a deep bed to grow in, but it requires that such beds should be free from corrosive substances.

Deep ploughing, and plentiful manuring, are the sure guaranties of bountiful crops.

5. Bone-dust, except when used in the drill, should always be harrowed in. It should be put in bulk with other matters, and excited into an incipient state of decomposition before being used. A good plan would be, to mix the bone-dust with an equal quantity of ashes, and add 2 bushels of salt for every ten or fifteen of bone-dust intended to be sown on an acre, and permit the mass to remain in bulk until they become heated, then to shovel them over, and suffer them to remain until they become heated a second time, when they would be fit for use. The bone-dust, before being put into the compost, should be made wet with water, moisture being necessary to produce the process of decay.

If *prompt* action in the operation of the bone-dust be the object sought after, it would be best to dissolve the bone-dust in *Sulphuric acid*. For every 100 lbs. of Bone-dust, take 34 lbs. of Sulphuric acid, diluted with three times its volume of water, pour the diluted acid over the bones, say one-third part at a time, at intervals of a few days, stirring up the bone-dust each time. When the bones are dissolved, mix them with an equal quantity of ashes, and they will be ready for being sown.—Thus *reduced*, bone-dust acts more powerfully, and about one-third the quantity will answer for a dressing; though, for very obvious reasons, the effects will not last so long. The first plan of using this manure, conduces to *permanent* improvement of the soil—the last, to a *present* realization of a bountiful crop.

If left in bulk, as recommended in the first recipe, for several months, the bulk must be shoveled over every few weeks to let in atmospheric air and thereby depress the heat, to prevent carbonization, as that would drive off the nitrogenous matters which abound in bones, and which may be said to be the life-blood of manure.

6. We should infinitely prefer 100 bushels of soap-boilers' ashes, whether made from wood ashes, or from soda, to 60 of lime. It is our belief, that in 100 bushels of soap-boilers' ashes, there is lime enough for an acre of land, besides various other inorganic substances, each of which is friendly to the growth of plants, and the melioration of the soil.

7. We believe that 10 bushels of bone-dust, made from unboiled bones, prepared in either of the ways we have pointed out, infinitely preferable to "200 pounds of Peruvian Guano"—nay, we be-

lieve its effect would be greater than would be an application of 400 lbs. of guano; we believe also, that the action would be equally marked upon the first crop, while its effect upon the permanent improvement of the soil would be visible for many years beyond that of the guano.

8. We not only believe, but do *know*, that a bushel of plaster to the acre, on Clover, is of material advantage. We have, by experiment, on the same piece of ground, seen it cause an increase of 100 per cent. of clover, viz: the *un*-plastered part of the lot produced 1 ton, while the *plastered* part, immediately adjoining, both heavy clay, produced two tons of hay. The whole piece had been manured and prepared precisely alike. We should prefer to use plaster on wheat in the spring, to doing so in the fall, though we should look for benefit, if applied at either season.

If Clover be plastered in the spring, there is no occasion to repeat it after the first cutting; and, though we would expend freely, when *necessary*, to improve our soil, and increase our crops, we certainly are opposed to *unnecessary* expenditures.

9. We do not think well of sowing clover seed with wheat in the fall, in our climate. Under favorable circumstances of season, it might succeed well, but it would be at the expense of the wheat. As we have often stated before, we would delay sowing clover seed on wheat, until such time in the spring as the frost was out of the ground; then we would sow the clover seed, and roll it in—and we will go farther, and say,—that whenever, and wherever we sowed clover seed, we would sow orchard grass seed also. By combining the two together, a *better* hay is the result—the quantity is greater, while the pasture is infinitely superior.

Communicated.

To make 2 *or* 3 *bushels Wheat and Corn grow, and to Fatten or Keep* 2 *or* 3 *Cattle or Sheep, instead of* 1.

The plan proposes, first, to subdivide large tracts, in order to secure better cultivation; then to crop alternately, corn and wheat the same season, manuring always for the corn crop, this will give the same ground manure every 2 years.

The whole process is perpetual, and cannot fail, while the whole of the crops are fed upon the land and returned to it again, except the wheat, which is sold, and that deficiency is more than supplied, by the animal matter from the stock. This plan requires great attention to manuring, and can only be carried out successfully, by fattening stock, in the winter—the profit of which is evident, from the present and prospective high prices of meats.

The machine here offered—see advertisement—(and for which it was expressly gotten up,) reduces the coarse fodder into a form most acceptable to horses, cattle, and sheep, and at an expense, far less than the cost of making hay, or saving tops and fodder in the usual way.

Keep as few cattle or sheep as possible in the summer, and as many in the winter as you can feed well.—If you have bottom, or wet pasture lands, sufficient for your stock take away all division fences on your arable lands, in order to save fencing, (which is very expensive) and to render more convenient their cultivation, as by this plan the stock are not allowed to run on the lands cultivated. There are some particulars connected with this plan which will suggest themselves to a practical mind—If it be desired that I touch the subject more intelligently, by way of explanation, I will be happy to do it. The above plan is in successful operation by a

PRACTICAL FARMER.

WORK FOR THE MONTH.

FEBRUARY.

As in many parts of our far-reaching country opportunities of culture occur during this month, we shall seize the occasion to make a few suggestions, which appear to us as being opportune to the occasion and time.

In our opinion, no agriculturist should do any thing in the way of the growth of crops, unless he have both the disposition and the means of doing justice to their capabilities of production. Let us, for instance, take the corn crop. This plant, as every one knows, who have studied its nature, can only be made to yield in abundance, when grown in very rich soil, or where the land may have been liberally manured. And yet, we often see large fields of poor lands devoted to its cultivation, without a single spoonful of manure being given to such lands. The product, under such circumstances, is always meagre, scarcely giving back the cost of interest and labor bestowed. Whereas, had a moiety of the labor thus devoted, to grow corn on soils wherein there were nothing for it to eat, been appropriated to the collection of materials to compost into manure, those very fields would have yielded profitable crops. Ah! but says these large-field-culturists,—it takes so much time to collect such materials!! But we would ask,—is it not better to devote this *time*, to providing *food* for your corn, than to cultivate it on land that is destitute of those elements which are essential to vegetable life—which are necessary to enable the corn plant to grow in vigor and mature its grain? We think it is, and thus believing, we are free to declare, that the true policy is, that no more corn should be grown on a farm than can be well provided with food, and well cultivated. If the corn plant is generously fed, its product will be abundant and highly remunerative—*stint* it, and what is the consequence? A wretchedly poor crop—a crop that brings its grower in debt, and increases the poverty of his land. For our part, we would never plant corn under circumstances that did not authorize us to look for a yield of eight barrels to the acre, under a favorable condition of the seasons. We say eight barrels, because we believe *that less than that quantity will not pay well*, and, because we do know, that more than thrice that quantity may be raised on an acre of good land, if the ground is well prepared, and plenty of food, and cleanness of culture, are looked to as the cardinal points of success. And yet, how many fields do we see, that do not average three barrels to the acre? Hundreds and thousands there are of that character in our country. We know a farm within three hours ride of Baltimore, which, at the request of its owner, we visited in 1846, early in the month of June, to examine a twenty acre field which he had in corn, which had then received a second working. The field was as clean of weeds as a new penny is of corrosion, and its proprietor, who had then but recently purchased the farm, with exultation, asked us,—"How many barrels of corn do you expect I shall get from this field?" Our reply was—"If you get a bushel of good corn from the twenty acres, you may consider yourself fortunate." Our answer was laughed at by him—though

he confessed to us, afterwards, that he did not get a single ear of corn from the whole field—all that it yielded was a few *nubbins*. Under our instructions, he afterwards limed and manured that field, and when we again visited him in 1848, he had growing on the same field, one of the most luxuriant crops of clover we had ever seen—his crop of wheat, the previous year had been upwards of twenty bushels to the acre.

With these remarks, we will be content, for the present, and would next direct your attention to matters necessary to be done

ON THE FARM.

Composts.—The accumulation of the raw material, for being formed into composts, should claim present attention. Seize, then, we beseech you, every suitable occasion during this month, and the next, to collect them. It is unnecessary to specify what you should gather, for as a general rule, any thing that ever had life, will reproduce it.

Fencing Stuff.—If you have not already secured a supply, do so without further delay—Fell the trees, split them into posts and rails, haul them to your barn, and prepare them, in order that they may be in a state for use, when needed. No farmer should be without a supply on hand to meet every contingency.

Sowing Clover Seed.—During any part of this month you may sow clover seed on your wheat fields. 12 lbs. per acre is about the right quantity. We, however, would defer sowing until the frost was out of the ground,—when we would sow the clover seed, and *lightly* harrow it in with a light harrow, and then roll the ground. If we did not harrow, we would at all events, *roll the seed in*; and to the clover seed we would add *one* or *two* bushels of orchard-grass seed per acre—each to be sown separately, to ensure a more even distribution of the seed. The latter seed should be *moistened*, and mixed with ashes before being sown. By delaying sowing the clover and orchard grass seeds to the time we propose, two benefits will result—a greater certainty of vegetation on the part of the seeds, while the clover and grass, to a great extent, will not interfere with the growth of the wheat.

Stiff Clays.—If you have any such lands that you intend for spring culture, plough them up, and give them the benefit of the frost, to break down their texture. But be careful not to plough them while wet.

Sandy soils and clay subsoils.—These would be benefitted by having two inches of the subsoil turned up, cross ploughed and harrowed in the spring. By such operation, three benefits will be obtained,—your crops will have deeper pasture, the soil will stand the drought better, and be more retentive of the manure you may apply to it. If your land needs liming, you could not desire a better time to give it a dressing than when you may have thus deepened its surface.

Out-Buildings.—If these need it, have them repaired, and give them a good coat or two of whitewash. To enable our readers to make their whitewash correctly, we append the following recipes:

CHEAP WASH FOR COTTAGES OF WOOD.

For the outside of wooden cottages, barns, outbuildings, fences, &c., where economy is important, the following wash is recommended:

"Take a clean barrel that will hold water. Put in it half a bushel of fresh quick-lime, and slake it by pouring over it boiling water sufficient to cover it 4 or 5 inches deep, and stirring it till slaked.

"When quite slaked dissolve in water, and add 2 lbs. of sulphate of zinc, (white vitriol) which may be had at any of the druggists, and which in a few weeks, will cause the whitewash to harden on the wood-work. Add sufficient water to bring it to the consistence of thick whitewash. This wash is of course white, and as white is a color which we think should never be used, except upon buildings a good deal surrounded by trees, so as to prevent its glare, we would make it a fawn or drab color before using it.

"To make the above wash a pleasing cream color add 4 lbs. yellow ochre.

"For Fawn color take 4 lbs. umber, 1 lb. Indian red, and 1 lb. lampblack.*

"To make the wash gray or stone color, add 1 lb. raw umber and 2 lbs. lampblack.

"The color may be put on with a common whitewash brush, and will be found much more durable than a common whitewash, as the sulphate of zinc sets or hardens the whitewash.

Cheap Wash for Cottages of brick, stone stucco or rough cast.—Take a barrel and slake half a bushel of fresh lime as before mentioned; then fill the barrel two-thirds full of water and add one bushel of hydraulic cement or water lime. Dissolve it in water and add three pounds of sulphate of zinc. The whole should be of the thickness of paint, ready for the brush. This wash is improved by the addition of a peck of white sand stirred in just before using it. The color is a pale stone-color, nearly white.

"To make it a fawn color, add 1 lb. yellow ochre 2 lbs. raw umber, 2 lbs. Indian red.

"To make it a drab, add 1 lb. Indian red, 1 lb. umber, 1 lb. lampblack.

"This wash, which we have tested thoroughly, sets and adheres very firmly to brick work and stucco, is very durable and produces a very agreeable effect."—*Downing's Architecture.*

COMMON WHITE WASH.

Slake ½ peck of lime with boiling water, when slaked, reduce it to the consistence of whitewash, by adding boiling water, dissolve half an ounce of indigo blue in hot water, stir that in; then add half a gallon of chamber-ley and stir the whole well, when the wash will be ready to be put on, and will prove to be a beautiful white color, and not subject to peal off.

Forming Tobacco Beds.—As the time is at hand for preparing Tobacco-beds for the growth of plants, we deem it our duty to remind our readers, that for the whole care and management of the tobacco crop, from the sowing of the seed, to the curing of the leaf for market, they cannot resort to more reliable authority, than is to be found in the admirable *Essays* published in our 5th volume, pages 184, 219, and 266, and 297, of our 6th volume. Those essays are from the pens of gentlemen who are not only highly intelligent, but who, for many years, have been successful tobacco planters, and who, therefore, speak from their own ripe experience and enlightened practice.

Yellow Locust for Fence Material.—As there is great complaints of the scarcity of fencing timber, we would suggest to our readers the propriety of sowing *yellow locust seed*, with the view of raising scions to set out in groves, to be grown for posts.

Before being drilled in, the seed should have

* *Lampblack*, when mixed with water colors, should first be thoroughly dissolved in alcohol. Yellow ochre, Indian red, &c., are sold in dry powders, at a few cents per pound.

scalding water poured over them, and remain in the soak for 12 hours, when the water should be poured off, the seeds mixed with ashes, and be thinly drilled in rows, 4 feet apart, 2 inches deep. The plants should be cultivated and kept clean the first season. At 1 and 2 years old, the young trees will be fit to be planted out into groves, where they should stand 12 by 10 feet apart.

To prevent injury from the insect that preys upon the locust tree, we would recommend that the trunks be washed each spring and fall, with a mixture composed of equal parts of *salt, snuff, soft soap* and *flour of sulphur*, brought to the consistence of cream, by the addition of water. We do not assert that this will prove an effectual remedy; but, we do say, that we believe it will.

Chestnuts.—It would be well, also, to drill in a few gallons of these nuts for similar purposes, for the time is not distant, when fencing timber will be among the things that were, if speedy means be not taken to grow it. At present but few farms possess a supply.

Orchards.—We would here refer to our former recommendations with regard to the treatment of orchards, and the management of the trees. And while we do so, let us enjoin it upon the owner of a farm upon which there is no orchard, to make arrangements to have one set out the coming spring, or next fall, as the condition of a farm without good fruit, is almost as bad as a farmer without a wife. As orchards, when properly planted and cultivated, are destined to last a life-time, great pains should be taken in the selection of the kinds of fruit—none but the best should be planted, and those obtained from a nurseryman of reputation. As to buying fruit-trees from *tree pedlars*—or permitting them to graft, or bud,—these are things that no sensible farmer should dream of, unless for a joke; for in ninety out of a hundred cases, he would be sure to be cheated.

Poultry.—If you desire plenty of eggs, and early spring-chickens, *see* that your fowls are well cared for this month. Give them occasional messes of fresh meat, or of fresh fish—feed them moderately, but daily, with grain, as corn, oats and buckwheat—provide them with sand, ashes, and gravel; clean out your hen-house, nests and all, and give both the inside and outside, a couple of coats of white-wash; replenish the nests with fresh straw, or hay, and take care in forming the nests, to put a handfull of refuse tobacco in the bottom of each, and when the nest is made, to sprinkle a handful of ashes over the hay, or straw, of which it may be made.

Milch Cows.—*This*, as well as next month, is very trying upon stock of all kinds; therefore, if you desire your milch cows to furnish generous supplies of milk, cream, and butter, you must be *generous* to them. Straw will, if given very, very, liberally, keep body and bones together; but it is altogether unreasonable to rely upon such food to enable your cows to yield good milk, if they be fed alone upon it. It takes good hay, rich slops, and roots, to encourage the milch cow to give much, as well as good milk. And while liberal feeding is essential to the secretion of milk, to the formation of muscle, fat, &c., so is comfortable lodgings, good bedding, well ventilated stables, and clean hides, among the agents that cannot be dispensed with, if you desire your cow to be in good health and condition. They should be watered thrice a day, and receive 2 oz. of salt, ashes, and lime, mixed together, twice a week.

In-calf Cows and Heifers, should receive good hay, or fodder, three times a day, and be otherwise treated, as advised for milch cows.

Young Stock, of all kinds, should be generously fed throughout this and the next month. Three times a day they should receive hay or fodder, a grain feed at night, and be kept, at all times, in such condition as to ensure a moderate but continous growth of muscle, fat, bones, &c. If not thus kept, their size will be cut short fully a third or fourth part.

Store Hogs—Breeding Sows.—Feed these so as to keep them in good condition—let their sleeping apartments be dry and warm, well supplied with straw, leaves, or pine shatters, which should be cleaned out once a week—supply their troughs with water daily—let them have access to a yard well bedded with leaves, muck, pine shatters, and trash of all kinds. In the middle of their yard, let there be a rubbing post. Give them ashes, charcoal, and rotten wood, frequently, and you need not fear of their doing well.

Horses and working animals, must be well fed, daily cleaned, comfortably provided with litter in their stalls, be given the salt, ashes and lime mixture, 2 oz. each, thrice a week, and have their grain food alternated, which, as a matter of economy, as well as health, should be chopt and mixed with cut hay, or straw, and they be watered thrice a day.

Wagons, Carts, and Implements of Husbandry.—Examine all these with care, *yourself*, and if there be any of them that need repair, have them repaired. Make it a point of duty, as it is assuredly your interest—to keep all such things under cover; for protection from the weather, will make them last as long again. See that the wheels of your carriages, wagons and carts, never suffer for the want of greasing.

Oats.—As it will be time to seed oats in parts of the country where our paper circulates, by the time it may reach its destination, we will seize this occasion to say, that a good crop of oats, *without assistance, by manure*, cannot be grown in poor land. And as such is the case, we will state certain proportions and kinds of manure, which, if applied *per acre*, will ensure good crops, the season and climate being congenial.

1. 200 lbs. of Guano, and 1 bushel of salt, well mixed together, spread broadcast, and ploughed in four or five inches deep, or if thus mixed, the guano and salt may be used as a top-dressing, and be harrowed in, as the *muriatic acid* of the salt, will unite with the ammonia of the Guano, form the muriate of ammonia, render it a fixed salt, and prevent its escape by exhalation.

2. 200 lbs. of Guano, and ½ a bushel of plaster, to be well mixed together, sown broadcast, and ploughed in.

3. If the land be clay, clay mould, or loam, having in it much vegetable matter—or if it be a clover-ley, or grass sward, 200 lbs. of Guano alone will answer.

4. Ten loads of marsh mud, or any kindred substance, and 10 bushels of ashes, well mixed together, left in heap a few weeks, applied broadcast, and ploughed in, will secure a good crop.

5. Ten loads of marsh mud, or any like substance, and 100 lbs. of the Nitrate of soda, or Nitrate of Potash, well mixed together, broadcast, and ploughed in, will secure a good crop.

6. 100 lbs. Nitrate of Soda and 2 bushels of

salt, mixed together, used as a top-dressing, and harrowed in, will secure a good crop.

7. Ten bushels of bone-dust, 10 bushels of ashes, 1 bushel of plaster, (or two of salt,) mixed together, suffered to remain in heap a few days, will secure a good crop, used as a top-dressing, and harrowed in.

8. 100 bushels of marl mixed with 10 loads of marsh mud, will secure a good crop—to be broadcasted and harrowed in.

9. 50 bushels of lime, 10 loads of woods-mould, and 6 bushels of salt, will secure a good crop.

10. Five loads of marsh mud, or woods-mould, 25 lbs. of the nitrate of potash, 2 gallons of oil, and 2 bushels of salt, mixed well together, sown broadcast and ploughed, or harrowed in, will secure a good crop.

11. Five bushels of bone dust, 5 bushels of ashes, 2 bushels of salt, and 2 gallons of oil, well mixed together, left in the heap a few days, sown broadcast, and harrowed in, will secure a good crop.

12. Five bushels of bone dust, 200 lbs. of cracklins or chandler's greaves, 10 bushels of ashes, and 1 bushel of plaster, well mixed together, and left in the heap a few days, will secure a good crop.

13. Ten loads of pine shatters, 20 bushels of ashes, 10 loads of marsh mud, 2 bushels of salt, or 1 bushel of plaster, mixed together, and ploughed in, will produce a good crop.

14. Ten loads of stable or barn-yard manure, 10 bushels of ashes, and 2 bushels of salt, or 1 bushel of plaster, well mixed together, and ploughed in, will produce a good crop.

15. Four bushels of bone dust dissolved in 67 pounds of sulphuric acid, diluted with thrice that quantity of water, mixed with 10 bushels of ashes, and 2 bushels of salt, harrowed in, will produce a good crop.

Any lands that may be thus manured, and put in oats, will bear being seeded to clover, or clover and orchard grass, with the positive certainty of a good crop of oats, a luxuriant growth of clover and grass, and of being sufficiently improved to go through a profitable rotation of crops.

In sowing the clover and orchard grass seed, each should be sowed separately—the latter seed should be spread on the barn, or some other floor, moistened, shoveled over, repeatedly, and then be mixed with ashes, to separate the seed, and ensure an equal distribution of them. We would not sow at the time of seeding the oats, but let the oats be up two or three inches, then sow the clover and grass seeds, and roll them in. By this delay in seeding to clover and orchard grass, the oats would get the start, and not be interfered with by the clover and grass plants. After harvest, the orchard grass, from the rapidily of its growth, would sufficiently shade the clover, to prevent injury from the intense heat of the sun.

Exhibition of Reaping Machines at harvest.—We recently called attention to the importance of a trial of Reaping Machines at the next harvest—and suggested that the subject should be taken up by our State Society at its quarterly meeting. The Ohio Cultivator for January is urging the same subject upon the Board of Agriculture of that State, and also proposes that trials of Horse Rakes and Wheat Drills be made at the same time.

We find by the Journal of the N. Y. State Agricultural Society, that a proposition is to be laid before the Executive Committee to have a test of Reaping Machines at the next harvest.

WORK IN THE GARDEN.

FEBRUARY.

There is no spot on a farm so competent to ensure comfort, and profit, as is the space allotted to a *garden*, if that be well tilled—nay, so far as regards profit, it is safe to assert, that half an acre devoted to such purpose, and cultivated, as it ought to be, with skill and industry, will yield more profit than any three acres which may be appropriated to field culture. Besides which, the measure of luxury which it vouchsafes to one's family, is too sacred to be estimated by those rules by which the values of dollars and cents are determined. We have sometimes thought, that the owner of a farm, who failed to provide a well appointed garden for his family, omitted a great moral duty, and was, at the same time, neglectful of his interest. Thus thinking and believing, we have been for years laboring to impress our own convictions upon the minds of our readers; and it has been a satisfaction to us to know, that, to a great extent, our labors have been fruitful of good results; but as we are apprehensive there is still a large verge to be filled up, we shall continue to call attention to the subject, considering it to be one of vast importance in every light in which it may be viewed.

With these prefatory remarks, we will proceed to point out certain things which should be done this month to ensure supplies of early vegetables the coming season; and as the suggestions we shall make, if carried out, will not be expensive, we indulge the hope, that the *lady* of every subscriber to our journal, will feel herself called upon, to see that her garden be made such a one as may be looked up to as an example for the neighborhood—such a one as will elicit the praise of all whose judgments are worthy of appreciation.

Sowing Seeds for early use.—It is to be presumed, that all our enterprising readers have prepared their gardens with hot-bed frames, therefore, we take pleasure to remind them, that during this month they should sow seeds of the following kinds of vegetables, viz: *Cabbages*, of early and late kinds, *Lettuce*, *Tomatoes*, *Egg-plants*, *Cauliflower*, *Broccoli*, *Celery*, and *Oyster plants* or *Salsify*.

Celery seed may be sown in the open ground as soon as the frost is out of the ground, to raise a crop to succeed that which may be grown from the plants grown in the hot-bed.

Spinach.—Whenever the frost is out of the ground, select a good deep loamy, or sandy-loam bed, manure it freely, dig it a spade deep, rake well, so as to thoroughly pulverize the soil, then, with the corner of your hoe, draw drills 12 inches apart, 1 inch deep, and sow spinach seed therein, thinly, cover with the rake, and pat down the ground over the seed with the back of a spade.—When the plants are up a few inches, thin them out, so as to stand 3 or 4 inches asunder, then keep the earth stirred and the bed clear of weeds and you cannot fail to be blessed with an early supply of this most excellent vegetable.

Radishes.—If you have a good loamy, warm border, facing the south, and protected on the north and west, you may sow radishes thereon towards the latter part of the month, or so soon as the frost is out of the ground. The border must be well manured, dug deep, and thoroughly pulverized by frequent raking. Should frost unexpectedly come after the seed is sown, or the plants up, protect the border by a covering of straw, corn-stalks, or pine bushes.

Parsnips, Carrots, Beets.—To secure an early supply of these for family use, you should drill in a few rows of each, so soon as, from the absence of frost, the ground can be dug and put in good order. Manure with 8 parts rotten dung and 2 parts ashes, dig the ground a spade deep, rake well, and then make your drills 18 inches apart, 1 inch deep, sow the seed very thinly, cover with the rake, and pat the earth with the back of the spade. When the plants come up, thin the parsnips so as to stand 4 or 5 inches asunder, the carrots 3 or 4 inches asunder, and the beets 10 or 12 inches asunder; stir them frequently with the hoe, and keep them clean, and you will be rewarded with an early supply of these excellent roots.

Peas.—The Pea is comparatively a hardy plant, and may be sown as early as the frost is thoroughly out of the ground.

Beans.—The Mazagan bean may be sown towards the last of this month anywhere south of Maryland, well protected and in warm borders there.

Raspberries.—Prune the vines, tie up the bearing ones, and dig in a compost composed of 6 parts rotten dung, 1 part ashes, and 1 part bone-earth. This compost should be thoroughly mixed together, and remain in heap some days before being used, in order that the incipient stage of decomposition may be excited in the bones, before the compost is used.

Grape-vines should be pruned, if not done before, tied up, and dressed with the same compost as that recommended for raspberries.

Currants—Gooseberries.—Trim your currant and gooseberry bushes, and give them a dressing of the same compost recommended above. The parts cut off, if you desire to multiply your currant and gooseberry bushes, may be planted out in a warm border

Strawberry beds.—Whenever the frost is entirely out of the ground, is the time to clean up your strawberry beds. At this time dig in lightly a pretty free dressing of a compost composed of 6 parts rotten dung, 2 parts ashes, then rake finely, and spread straw between the rows, over the straw strew tanner's-bark, and sow salt over the bed.

Asparagus Beds.—Thoroughly clean up your beds, then apply a full dressing of the compost advised above for strawberries, dig it in with a hay-fork, taking care not to disturb the crowns of the roots, rake between the rows, and sow salt over the bed with a very free hand.

Pot and Medicinal Herbs.—As every garden should be supplied with these, we will give a list of such as ought to be in every farmer and planter's garden. Sage, Thyme, Hyssop, Sweet and Pot Marjoram, Shallots, Chives, Celendine, Hoarhound, Balm, Mint, Chamomile, Lavender, Tansey, Sweet Fennel, Rosemary, Comfrey, Elecampane, Feverfew, Rue, and Wormwood.

Such gardens should, also, have a good collection of choice flowering shrubs, besides borders and beds of well selected flowers, as every thing which tends to beautify and adorn one's homestead, gives moral elevation to his position among his neighbors and friends, while it exerts an influence over his own feelings calculated to endear him to his home, and, consequently, to those whose love and respect should be more precious in his sight, and have a deeper hold upon his affections, than all the honors the world can bestow.

INTERESTING EXPERIMENTS.

We take pleasure in laying the following *experiments* before our readers, not because they are a complete vindication of the views we have heretofore advanced, but because the experiments possess merit of themselves—because they were conducted with judgment, accuracy, and scientific skill, and by their results, place a cherished principle—a great chemical truth—upon a basis which defies the effects of assault. The learned writer deserves the thanks of the agricultural community, and will please accept the sincere homage of

The Editor of the American Farmer.

Virginia, Jan. 2d, 1852.

Mr. Sands—*Dear Sir:*—When in Baltimore, a short time since, I found myself so much engaged, as not to be able to copy the notes that I promised in relation to my experiments upon the "fixing" power of gypsum. I give them now, leaving you to use the facts as you choose, but do not publish my letter in the Farmer.*

In the experiments, I used the Carbonate of Ammonia of the shops; I used that particular salt because that is the one given off in all cases from guano or fermenting manure—so soon as change commences in either, so soon does the carbonate begin to be evolved, no matter in what state the ammonia previously existed. In the first experiment I mixed about equal quantities of carbonate of ammonia and gypsum, and wet them. The carbonate had just been taken from the bottle, and its odor was very powerful. In a very few minutes the odor was sensibly weaker, and in half an hour you could perceive the odor, and that was all. After allowing it to stand for 48 hours, I made an analysis of the mixture—found that decomposition of both salts had taken place, and that the sulphate of ammonia and carbonate of lime were present in quantity. For a second experiment, I took the same mixture, moistening it slightly. The result was the same as in the preceding case, there being this difference, that the decomposition of the salts was less rapid—hence while *damp* plaster will retain much ammonia that would otherwise escape, it will be more effective when *wet*. In a third experiment, I used the same materials, but perfectly dry. For the first 24 hours I could not perceive that the plaster had the slightest effect, so far as I could judge from simple inspection, but at the end of 48 hours I was perfectly satisfied that some ammonia had been "fixed," even before making any analysis. I made the analysis, however, and found that even in this most unfavorable case, some of the gypsum had been decomposed, and a corresponding amount of the sulphate of ammonia found.

This last experiment I repeated several times, and always with the same results. I varied it, by suspending dry gypsum over dry carbonate of ammonia in a vessel, and allowed it to stand some days—the results were the same as in the other cases, and ever will be so.

These experiments prove to me that, no matter in what state (whether *wet, moist,* or *dry,*) plaster is presented to guano, or any other manure from which the carbonate of ammonia is escaping, it must retain a certain amount of ammonia that would otherwise make its escape into the atmosphere. Respectfully, yours, &c. G.

*We regret that the writer has desired to suppress his name—we however give the letter as we received it, which we hope will not conflict with his wishes.

VALUE OF URINE AS A MANURE.

We have been for many years endeavoring to impress upon the minds of our readers, *the value of urine as manure*, and to point out to them the propriety of so arranging their stables, and cattle yards, as that it might be saved from waste. We have done so, because, from our knowledge of its constituent elements, we were aware that pound for pound, it was more valuable than the solid evacuations, when mixed with animal or vegetable matter convertible into mould.

With the view of bringing the subject more fully before our agricultural friends, we now copy the following chapter from professor *Gray's* excellent work, entitled "*Agricultural Chemistry.*"—*Editor of the American Farmer.*

"MANURE, CONSISTING OF SALTS DERIVED FROM ANIMAL BODIES.

This class of manures includes the *liquid* evacuations of animals, which are salts dissolved in water. These salts are different from those which will be described under the head of mineral or saline manures, because they are formed of an animal acid; that is, of an acid which is produced in the animal organs. This acid is found in urine, and is called *uric acid*. It is composed of

Carbon	36.11
Hydrogen	2.34
Oxygen	28.19
Nitrogen	33.36

The quantity of nitrogen renders it a powerful manure, as it becomes the food of plants. This acid appears to be derived from an animal principle called *urea;* which may be obtained from urine in transparent colorless chrystals, very soluble in water, in which it suffers no change; but when mixed as in urine, it is converted into the carbonate of ammonia. Alkalies produce the same effect. *Urea* is composed of

Carbon	19.99
Oxygen	26.66
Hydrogen	6.66
Nitrogen	46.66

The oxygen, carbon, hydrogen and nitrogen are in such proportions, that they are converted *wholly* into carbonic acid and ammonia; hence the quantity of *urea* in urine, is equal to its weight of carbonate of ammonia. The urea and uric acid, render the liquid excretions of animals equally valuable with the solid evacuations; and much more valuable, when vegetable matters are employed to absorb the gaseous products.

1. *Urine of the Cow.* The liquid evacuations of the cow are composed of

Water	65
Urea	5
Phosphate of Lime	5
Sal. Amm. and Mur. of Potash	15
Sulphate of Potash	6
Carbonate of Potash and Amm.	4
	100

It will be seen, that the quantity of ammonia in the urea, as compared with cow-dung, is as 5 to 2; and in the other ammoniacal salts as 15 to 2, or about 4 times the quantity of the salts of ammonia in the liquid, that there is in the solid evacuations.

100 lbs. of this urine yield 35 lbs. of the most powerful salts; hence the importance of saving urine by introducing into the yard or barn cellar substances, as peat, which will prevent it from being washed away. If it is true, as has been shown by experiment, that a cord of loam saturated with urine is equal to a cord of the best rotted manure, and if one cow would furnish sufficient annually to manure an acre and one-half of land, while the solid evacuations will not fertilize more than an acre, it must be evident to every farmer that at least one-half of his manure is wasted, if exposed to the influence of rain, and the ordinary action of the atmosphere.

2. *Urine of the Horse.* The urine of the horse, and sometimes of other herbiferous animals, contains *hippuric acid*, which takes the place of the uric acid. The result, however, in vegetation is nearly the same, as the acid in both cases gives rise to ammonia by decomposition. The value of horse-urine will appear from its composition. 100 parts contain

Water	94.0
Urea	.7
Carbonate of Soda	.9
Carbonate of Lime	1.1
Hippurate of Soda	2.4
Muriate of Potash	.9
	100.0

From its composition, it is at least equal in value to cow-dung.

3. *Human Urine* is equally valuable with either of the preceding. It is composed in 1000 parts of

Sal. Ammoniac	.459
Sulphate of Potash	2.112
Muriate of Potash	3.674
Common Salt	5.060
Phosphate of Soda	4.267
Phosphate of Lime	.209
Acetate of Soda	2.770
Urate of Ammonia	.298
Urea with coloring matter	23.640
Water	967.511

The quantity of Salts in 1000 lbs. of this urine is upwards of 42 lbs. The salts of ammonia make it about equal in value to cow-dung, pound for pound; but as the other salts are more than double, 1000 lbs. of human urine is worth nearly 2000 lbs. of the best cow-dung.

If we now compare the quantity of salts in the solid, with those in the liquid evacuations, we shall find that human, horse and cow dung, contain upon an average, 1 per cent., while human urine contains 4.24 per cent., that from the horse 6, and that from the cow 35 per cent.

There is no substance, however, which varies more in composition than urine. Its composition depends upon the kind of food, but it is always a most valuable manure. No farmer should permit it to run to waste, but should so prepare his cattle-yard by loam or swamp-muck, and by plaster, as to save these invaluable products of his stables, and of his own dwelling.

As the urine is generally mixed with the solid excrements in the barn-cellar or cattle-yard, it increases the value of this manure, it promotes its decay, and adds to its own salts; but if the whole is exposed to the influence of atmospheric agents, it facilitates their action and aids in depreciating its value; hence, it is generally wholly lost to the farm. Farmers ought generally to know this, and to be apprised of the fact, that one-half at least of their manure is wasted."

Brushes, Briars, &c.—Root these out now.

CULTURE OF LUCERNE.

Being desirous of seeing this plant introduced generally into the system of husbandry of our country, we continue our extracts from Mr. Arthur Young's "*Travels in France.*" The following is his note of its culture at

"*Brasseuse.*—Commonly sown with oats that succeed wheat, and often upon one ploughing only; yet such is the happy texture of the soil, a fine friable sandy loam, that it succeeds tolerably well, and would with better husbandry, yield an immense advantage. It lasts 10 or 12 years, and longer when taken care of. They cut it thrice a year. It yields, at the two first cuttings, 300 or 400 bottes per arpent of hay fit for horses, and the third is for cows. Madame la viscountesse du Pont, sister of the duchess of Liancourt, has possibly more lucerne than any other person in Europe. She has 250 arpents, 80 of which were mowed this year. I saw the hay, and never met with better or sweeter, yet botted from the field in the method universal in France. She was so good as to inform me that no food for cows yielded finer butter; I tasted it, and none could be better flavored."

Its culture is thus noticed by him at

"*Meaux.*—When oats have two leaves, they harrow in the lucerne seed 20 lbs. per arpent (17 lbs. per acre;) the first year it produces the first cut, but 100 bottes per arpent, afterwards 400, (12 tons 2 cwt. per acre,) some 500, each of 12 to 16 lbs; the cut 200 (1 ton 1 cwt. per acre,) the third 100 (1½ cwt. per acre,) in all 3 tons 13½ cwt.; the hay of the first cut is given to horses, the second to sheep, and the third to cows; it is never manured; but the soil is a deep rich loam, that is to be ranked among the first in the world; couch is the great enemy to it; they never use it for soiling, but always for hay: all is botted in the field. They are now (July 3d) mowing the first growth, but some has been cut for some time; nothing they say, improves land so much; all the good oats that Mr. Gilbert shewed me at Neusmotier were after lucerne; the difference between those and the other crops after wheat, being that of yellow and green."

Upon the foregoing, and various other, notes of the culture of lucerne in several of the provinces of France, Mr. Young makes the following

"Observations:—

"The culture of the plant under our consideration, is one of the principal features of French husbandry. We have gone to the French school for the culture of it, yet it is all managed, and with bad success in England, and has been so in every period; but in France, even in climates similar to our own, it is an object of almost uniform profit; and it must therefore be unfortunate indeed, if we do not extract something from the French practice deserving our attention and imitation. The first leading circumstance that demands our attention is the unvarying practice of sowing it *broadcast*. The lucerne in *Spain*, which is of a luxuriance we have no conception of, and the little I have seen in *Italy, is all sown in the same way*: a contrary practice, namely, that of drilling, has very generally taken place in England; it has been repeatedly urged, that the humidity of our climate renders hoeing necessary to keep it free from spontaneous grasses; and, *if* found to take place in the north of France, the climate very nearly resembles our own. After some years, those grasses destroy it there as well as here; but the French think it much more profitable when that happens to plough it up, than to insure a large possession by perpetual expense and attention."

"A Frenchman from Provence (Roque,) introduced this broadcast culture of lucerne, about 25 years ago, into England: I saw his crops, which were very fine, and equalled any in the North of France. Mr. Arbuthnot, of Mitcham, had it also in the same method on a large scale, and with considerable success; other persons have succeeded equally well, whose experiments may be found in the registers of agricultural tours through England; and the little lucerne to be found in England is chiefly in drills. It certainly deserves inquiry, whether this is not the reason of cultivation at large not having made a greater progress with us.* The preceding minutes seem to allow the conclusion, that the drill is *not* necessary for this culture; the *broadcast succeeds well* in every part of France, in proportion to the goodness of the soil, and to management, like every other crop.* * Its ameliorating effect is a singular feature in the preceding notes; the accounts are such as will surprise some persons."

Anxious as we are to see the broadcast culture of lucerne introduced into our country—and especially into the Southern States—we would not advise any one to undertake it, unless he would undertake also, to prepare his land thoroughly before he sowed his seed,—and make up his mind to eradicate the weeds and grasses, by harrowing his lucerne each fall. As a preliminary, all lands intended for its culture should be limed, marled, or ashed; the ploughing should be deep, and harrowed at intervals of a few weeks to encourage the growth, and ensure the destruction of weeds, before the seed were sown; it should also receive a heavy dressing of putrescent manures. Thus treated, with the aid of autumnal harrowings, and slight top-dressings with some concentrated animal manures, we have no doubt, that a lot, or field, of lucerne, might be preserved in a state of profitable yield for from 10 to 14 years, and that when broken up, the condition of the soil would be found to be highly improved. If the French can successfully use it as a meliorator of their soil, we can see no reason why a similar result would not flow from its culture by our countrymen.—*Ed. Am. Far.*

Experiments in Growing Swedish Turnips.

Mr. *A. T. Gardner* at Barrochan, Scotland, applied the following special manures to an acre of medium loam, sowed with Swedish turnips, viz:—

Farm-yard dung	15 tons,
Peruvian guano	3 cwt.,
Animal Charcoal dissolved in 1 cwt. of *Muriatic Acid*	2 cwt.,
Carbonate of Magnesia	1 cwt.,
Sulphate of Soda	1 cwt.,
Sulphate of Ammonia	1 cwt.,
Horn-dust	3 cwt., and
Common Salt	1 cwt.

The produce was 46 tons, 17 cwt.

To another acre he applied 30 tons of farm-yard manure.

The produce was 34 tons, 5 cwt. Difference in favor of the compound manures, 12 tons, 11 cwt. 38 lbs.—*Stephens' "Farmer's Guide."*

It is very obvious to us, that the *special* manures were applied to an extent far beyond any necessity, and that one-third the quantities applied would have produced equally good results.—*Editor Am. Far.*

FRUIT TREES—DISEASES AND INSECTS.

(Continued.)

The Canker Worm.—This insect is confined chiefly to New England; we have never seen it in New York. They generally emerge from the ground in March. According to Prof. *Harris*, some rise during the late autumn and winter months.—The female has no wings, but crawls up the tree and lays her eggs on the branches in May, in clusters of 60 to 100 in each, glued to each other and to the bark by a greyish varnish impervious to water; the little worms fall upon the leaves, and when numerous, devour them all, leaving only the mid-ribs. They leave the trees when about four weeks old, and descend into the ground. Their effects are most visible in June, when the trees, divested of their foliage, appear as if scorched by fire.

As the female cannot fly, the great point is to prevent her from crawling up; for this purpose various means have been tried and are recommended. One of the most effectual is to tie strips of canvass around the tree and cover it with tar, renewing the tar during their whole season of rising from October till May. Another is to make a close fitting collar of boards around the base of the tree, and keep them covered with tar. Mr. Jonathan Dennis, of Portsmouth, Rhode Island, obtained a patent for a circular leaden trough filled with oil, which proves an effectual preventive.

Caterpillars.—Of these there are many kinds that are more or less destructive to the foliage of fruit trees; but the Catterpillar described by prof. Harris as the American tent catterpillar, is the one that commits such general and extensive devastation in our orchards, and especially in certain seasons. The moth deposits its eggs in July, in large rings, on the branches of the trees; these remain in that state until the following season, when they are hatched in the latter end of May or beginning of June. Each ring produces three or four hundred catterpillars, and these weave a sort of web to live in. The appearance of a tree with three or four of these tents upon it, and the leaves completely devoured, is really frightful. There are two ways of destroying them: one is, to examine the trees carefully in February or March, at pruning time, and destroy the clusters of eggs by cutting off and burning the branches on which they are found. The next is to destroy the catterpillars in their tents after they are hatched. There are various ways of doing this, according to people's fancy and ingenuity. The quickest and most effectual method is to take a ladder, ascend the trees, and remove every nest with the hands. The early morning should be chosen, when they are in the nests. Some put a round brush on a pole and put it in the nests, and by giving it a few turns web and all are removed.

The Yellows on the Peach.—This is supposed to arise from negligent cultivation. It exhibits itself in yellow, feeble shoots, and small fruits prematurely ripened. It is said to be contagious. Trees exhibiting these symptoms should instantly be destroyed. To avoid it, care should be taken to propagate from trees in perfect health and vigor.

Mildew on the Peach.—The young shoots, leaves, and even the fruit of certain varieties, and especially the glandless ones, such as *Early Anne*, *Early Tillotson*, &c., are attacked by this. The only remedies are, to give the trees a dry, good soil, that will keep them in a vigorous condition, and to syringe freely twice a day when it begins to appear. The *Gooseberry* suffers seriously from the mildew, owing mainly to the heat of our summers. In Northern New York, Maine, Vermont and Lower Canada, the finest large English varieties are brought to greater perfection than in warmer districts, and with good culture almost come up to the English standard. In a cold damp-bottomed soil at Toronto, almost on a level with Lake Ontario, fine crops are produced with comparatively little difficulty from mildew or rust. This would indicate as a remedy, a cool soil and situation, and mulching the roots to keep them cool. The plants should be renewed every three or four years, and they should be kept vigorous by liberal manuring and good culture.

The Plum Wart or Black Knot.—The cause of this disease is quite uncertain, but the probability is, that it originates in a similar way to the gum, from an imperfect circulation of the sap, induced by violent changes of temperature*. Cutting out the diseased branch clear to the sound wood, the moment the knots begin to appear, is an effectual remedy, and they should all be burnt up. We have saved trees six inches in diameter that were effected on the trunk so seriously, that one-third of its thickness had to be removed to get below the disease. After it was cut out, we applied a plaster of grafting composition, covered it with a cloth, and in two years it was all healed over and sound.

Plum Trees are so neglected in the country, that multitudes of them are now standing literally loaded with these warts—not even an inch of any branch free from them—the most disgusting objects in the way of fruit trees that can possibly be imagined."—*Barry's Fruit Garden.*

*We have observed that cold weather, about the blossoming period, induce the gum in plum trees as well as in the peach, and when it continues long as in 1849-50 in Western New York, there is an unusual development of it.

BENEFITS OF DEEP PLOUGHING—VIRTUES OF THE SUBSOIL.—Mr. *David McVean*, of Monroe Co., New York, in the Patent Office Report for 1850—'51, says:—

"When the Oak openings were first broken up, it was not found advisable to plough very deep, or not more than was necessary to get under the roots of grass and brush, which was about *four inches*; but as the land became exhausted at the surface, from continued cultivation, it has been found necessary to deepen the furrow gradually to 7 or 8 inches, and even to 10 inches; and as the lime and salts become exhausted on the surface, a supply is sought in the subsoil for the wants of the crops."

We commend the above extract to the favorable consideration of our readers. The fact stated in it, that the farmers of Monroe County, New York, deepen their furrows gradually, with the view of procuring supplies of lime and other salts, when the surface soil becomes exhausted of them, should teach a lesson to others that may be turned to profitable account. The *success* of this practice, fully sustains us in the opinion we have so often advanced, that by increasing the depth of ploughing, many of the most valuable inorganic substances, of which the surface soil had become exhausted, might be found in the subsoil, as lime, magnesia, potash, phosphoric acid, sulphuric acid, &c.—*Ed. Am. Far.*

POMOLOGICAL REMARKS.

Mr. Editor—*Dear Sir:*—I have long since felt a desire to add a mite to the interest of your paper, and particularly on the subject of Pomology, as it seems to me that branch does not receive its due portion of attention by your numerous correspondents; yet much as I feel it the duty of your interested readers (and myself as one of them) to give a word on that subject, I nevertheless feel a delicacy in attempting to fulfil my part of the duty, from the fact that I am fully aware of my incompetency to even give my limited views and experience, in a manner sufficiently plain and intelligible, to make it interesting; but as you Agricultural, and Horticultural Editors, generally invite your readers to hand in rough notes, (with the promise that you will polish them) it gives us clodhoppers a little nerve to go ahead in our rough-and-tumble manner; so that I will not tire your good readers with a long scrawl of apologies (as is too often done) but will go to the subject at once, which shall have for its text: Are all Apples which are found in the long-winded lists of Nurserymen's Catalogues, worthy of cultivation? Are all Apples which have proven themselves of first quality in some particular locality, soil, climate, &c. found to be equally adapted to every other soil, climate, &c.? Nay, Mr. Editor, but this is a matter of much importance to those who are about to plant fruit trees, (for it will fit equally well to other fruits) and, as said before, I feel unfit to do it justice, yet by this, may awaken some more competent hand to this important duty, who will carry it to such an extent as the subject deserves. As I intend confinmg myself to the Apple alone in the following remarks, I shall commence with the varieties that ripen early, and follow on through their respective seasons of ripening, at the same time confining myself to such varieties as have proven fine (and not even a large number of those for the first trial) and at some future time may, if this is worthy a place in your paper, give a list in the opposite character.

1st. Prince's Harvest.—This is one of the finest early apples now under general cultivation, being of a fine yellow color, medium size, in flavor sub-acid, consequently suiting it to kitchen or table; and as we know it to hold its good character every where that it has been tried, we feel no delicacy in recommending it as we do. Tree a moderate, and not very handsome grower, but a fine bearer in alternate seasons.

2d. Early Ripe.—This is also a fine early apple, not quite so early as the former, a trifle larger, more conical in its form, rather more acid, and a more vigorous tree, not yet so extensively tried, and I do not think it equal to *Prince's Harvest.*

3d. Early Bough.—There is a general prejudice against sweet apples with many persons, but all those who may be fond of a truly fine sweet apple, approaching in flavor nearer to some pears, than an ordinary apple, must certainly consider this *the apple.* It is large in size, regular Pearmain shape, fine yellow, with a faint blush on some specimens, and for an early sweet apple is hard to beat; it might be a little more sappy, yet it is far from a dry apple.

4th. Summer Sweet Paradise.—Were this apple one month earlier, I would say it was better than the above—yet for its season it stands as does the former, and if it is gathered towards the latter end of August, (before it becomes so very ripe) it will keep for some weeks. Fruit large, fine yellow, uncommonly juicy, and well flavored; tree a rapid but irregular grower, and a young bearer, and so far as tested, has proven fine in various soils, &c.

5th. English Codlin.—This old and well known market summer apple, still stands fair as one of the best baking apples we have, (but unless very ripe, it is too acid to eat from the tree) and as it is fit for that use from the middle of August to the middle of September, ripening gradually all the while, it is quite valuable, and being a very smooth and fair apple, with a rich lemon yellow, and delicate blush cheek, it always commands a fair price. Tree, a fine vigorous grower and early bearer.

6th. Smokehouse.—As a fall and early winter apple, we at once place this among the first of Pennsylvania apples, but it has not yet been tested to any extent out of the State, consequently I cannot say further for it. Fruit large, a trifle flattened in form, very regular in size, always perfect, color lively red on a yellow ground, with a rich and perfumed subacid flavor; tree vigorous and strong, but rather of a drooping irregular habit, and a young bearer.

7th. Grindstone.—Now, sir, here is an apple that will keep a year, and, even then, is good—for nothing, or at least not more than third rate in flavor; yet an apple is an apple, when you have no others, and you can with truth say, as is often said of that one apple, that it is the best you have; and this same Grindstone is just as good as five-sixths of the new and boasted long keepers, some of which are so sour as to force you to have a half gill of pale brandy at hand to kill the griping occasioned by them, and such as the Shipley Green, Cranberry Blush, &c. are among that number.

8th. Newtown Pippin.—This is too well known to need any description, yet we would say that it is as it ever was, the highest flavored long-keeper we have, retaining its flavor to the last hour, and yet with all this, unless the orchardist goes to the care of manuring heavily, and cultivating carefully, it is useless for him to expect a good yield of perfect fruit, and worst of all, is the tardy growth of the trees, which, however, can be obviated by procuring from the nurseries some of the most vigorous growers, and let them grow one season; after which the Newtown Pippin can be engrafted on their heads, and will make an orchard of that old favorite sooner than by any other means.

9th. Sweet Pippin.—A large golden yellow sweet apple, oblong in form, fine flavor, and a very handsome growing tree, which produces well when once of fair size—fruit will keep until March with ease.

10th. Pittsburg Pippin.—Large, greenish white, much flattened in form, uncommonly juicy, crisp and high-flavored as an early winter apple, and at *all times commands the highest price at market.—Tree an early bearer, though it does not produce* such heavy crops until of fair size; growth of the tree is rather heavy, tolerably vigorous, and forms a fine spreading head.

11th. Yellow Bellflower, or Yellow Bellfleur, of some—is an old favorite in the Philadelphia markets, there commanding one of the highest prices given for any apple, and has been rather a general favorite, yet so far as my observation goes, I feel safe in saying that it will flourish better in loamy soils, than in a firm limestone clay, as in the latter I have frequently found it to be hurt by the black rot. Fruit medium to large, fine yellow when ripe, with numerous speckled blotches on it, and sometimes a faint blush on exposed specimens; form ob-

long, often much pointed; flesh greenish white, tender, juicy, with a brisk sub-acid flavor—in fact, decidedly fine, and would not plant an orchard without it. Tree forms a fine spreading head, but is not a young grower.

12. Esopus Spitzenburg —Here comes the great apple of New England, being taken as their standard, for in fact whenever a new humbug of an apple comes up, they will say, it is almost equal to the Newtown Pippin or Spitzenburg, in point of flavor,—so that we see at once that those two are their standards, and so is it here, in point of flavor, being second to no other; there it will keep until spring, but here no longer than February, and no doubt the farther south, the less of a winter apple; and here, Mr. Editor, is one of the important points, for us to learn, which varieties will retain their original character. Yet after all that is said of it not keeping so long as we might wish, I have no hesitation in saying it is one of the best apples we have, no matter when it ripens, and would advise to have it tried further south. Fruit medium size, fine lively red on yellow ground, form regular, somewhat flattened at the stem and calyx, tapering very slightly towards the calyx; flesh yellow, crisp, with an abundance of high vinous flavored juice. Tree forms a fine spreading head, and is a regular bearer.

13th. Gloria Mundi.—Here comes one of the monsters, frequently weighing twenty-two to twenty-four ounces, and sometimes so high as twenty-six ozs.; color white; form, what we might term regular; flesh, coarse and acid—will not keep longer than December, and scarcely that, but has always proven the same in all soils and climates, but yet I would not recommend more than a few trees in each orchard, and that merely for the show of them, for in truth they are the most magnificent of all apples, (when well grown) unless it should be the Beauty of Kent. Trees are fine growers and good bearers.

14th. Winter Sweet Paradise.—I will not go to the care of saying much of this apple, but would simply say it stands among winter sweet apples, as does the Summer Sweet Paradise and Early Bough, among the summer apples. Fruit medium size, greenish white, with a beautiful deep blush; flesh juicy, very high flavored, and will keep equal to the Newtown Pippin. Tree a most beautiful grower, and when once of proper size, a most abundant bearer.

15th. Falenwalder (or Fallen-forest, in English.) —This uncommonly handsome apple is of but second rate flavor, yet when we find so large and beautiful an apple growing on a strong and healthy tree, which will always have its crops, let others do as they may, it at once shows the value of that variety, and such is its character. Fruit very large, greenish color, with a fine blush, form generally regular, with a slight taper towards the calyx; flesh moderately juicy, with simple but pleasant subacid flavor—in use from the latter part of September to March or April, but if to be kept to the latter time, it should be gathered before it becomes too ripe. This apple originated in Berks Co. of this State, and has been widely disseminated throughout the State, and in all soils and situations has proven satisfactory.

16th. Rhode Island Greening.—This is another of their great New England market fruits, but does not seem to hold its own in other localities, for with us it drops rather early, is not equal to the Falenwalder in flavor, and not any more productive, neither is it so handsome. I also learn from various sources, that it is not worth growing in many parts of Ohio so that when we find a variety of any fruit changing in that manner, it is our duty to be on our guard; yet I do not wish to say one word against this apple in its native soils, for in truth we see some very fine lots of them come to the Philadelphia and N. York markets.

17th. Red Baldwin—Is a Massachusetts apple I believe, or at least a north eastern production, and there, is one of the finest they have, in flavor and appearance, but so far as tested here, we find it to drop too soon, and consequently dare not recommend it yet until further tested, but am of the opinion that it will fall short of some others that are of more southern origin, (*that is for our climate and soil.*)

Now, Mr. Editor, it would have given me pleasure to add several other varieties, but I fear I have forged the few I did mention, out to such a length as will tire the patience of your good readers, and therefore will stop my epistle by subscribing myself,

Yours truly, D. M., Jr.

Cumberland Nurseries, Carlisle, Pa.

THE BEST ICE-HOUSES.

Ice-houses are no longer luxuries. They now belong to the comforts of every substantial farmer. They can be constructed at little cost, and will pay their expense, in profit and pleasure, to a farmer who attends market, in a single season.

The following are the plans followed in New-England, where the matter is especially well understood, and are furnished to the *Boston Horticulturist*, by Mr. J. U. Wyeth, of Cambridge, Mass., whose practical information on this subject, is probably fuller, and more complete, than that of any other person in the country.

In New-England, Ice-Houses are now almost universally built above ground, they being found, after repeated tests to keep ice much better than those under ground. The following are Mr. Wyeth's directions for building:

"1st. An Ice House above Ground.—An ice-house above ground should be built upon the plan of having a double partition, with the hollow space between filled with some non-conducting substance.

"In the first place, the frame of the sides should be formed of two ranges of upright *joists*, 6 by 4 inches; the lower ends of the joists should be put into the ground *without any sill*, which is apt to let air pass through. These two ranges of joists should be about two feet and one-half apart at the bottom, and two feet at the top. At the top these joists should be mortised into the cross-beams which are to support the upper floor. The joists in the two ranges should be placed each opposite another.—*They should then be lined or faced on one side,* with rough boarding, which need not be very tight. This boarding should be nailed to those edges of the joists nearest each other, so that one range of joists shall be outside the building, and the other inside the ice-room or vault.

"The space between the boardings or partitions should be filled with wet tan, or sawdust. The reason for using *wet* material for filling this space is, that during winter it freezes, and until it is again thawed, little or no ice will melt at the sides of the vault.

"The bottom of the ice-vault should be filled about a foot deep with small blocks of wood: these are leveled and covered with wood shavings, over which a strong plank floor should be laid to receive the ice.

"Upon the beams above the vault, a pretty tight floor should also be laid, and this floor should be covered several inches deep with dry tan or saw-dust. The roof of the ice-house should have considerable pitch, and the space between the upper floor and the roof should be ventilated by a lattice window at each gable end, or something equivalent, to pass out the warm air which will accumulate beneath the roof. A door must be provided in the side of the vault to fill and discharge it; but it should always be closed up higher than the ice, and when not in use should be kept closed altogether.

"2d. An Ice-House below Ground.—This is only thoroughly made by building up the sides of the pit with a good brick or stone wall, laid in mortar. Inside of this wall set joists, and build a light wooden partition against which to place the ice. A good floor should be laid over the vault as just described; and this should also be covered with dry tan or saw-dust. In this floor the door must be cut to give access to the ice.

"As regards the bottom of the vault, the floor, the lattice window in the gables for ventilation, etc., the same remarks will apply that have just been given for the ice-house above ground, with the addition that in one of the *gables*, in this case, must be the door for filling the house with ice.

"If the ground where ice-houses of either kind are built, is not porous enough to let the melted ice drain away, then there should be a waste pipe to carry it off, which should be slightly bent, so as always to retain enough water in it to prevent the passage of air upward into the ice-house."

These plain and concise hints by Mr. Wyeth, will enable our readers, who have failed in building ice-houses in the common way, to remedy their defects, or to construct new ones on the improved plan just given. The main points, it will be seen, are, to place a sufficient non-conducting medium of tan or saw-dust, if above ground, or of wall and wood partition, if below ground, to prevent the action of the air, or the damp soil, on the body of ice enclosed in the vault.

Mr. Wyeth has not told us how large the dimensions of an ice-house built in either of these modes should be to provide for the use of an ordinary family through a season; but we will add as to this point, that a cube of twelve to fourteen feet—that is, a house, the vault of which will measure about twelve to fourteen feet "in the clear," every way, will be quite large enough, if properly constructed. An ice-house, the vault of which is a cube of twelve feet, will hold about fifty tons of ice.

In the ice-house above ground, the opening being in the side, it will be best to have a double door, one in each partition, opposite each other. The outer one may be entire, but the inner one should be in two or three parts. The upper part may be opened first, so that only so much of the ice may be exposed at once, as is necessary to reach the topmost layers.

Angola Peas—Ocra—Coffee.

Monroe, La., December, 1851.

To the Editor of the American Farmer—

I have sent to N. Orleans a small package to be forwarded to Messrs. R. Sinclair, Jr. & Co. of your city—in which there is a bundle containing two papers of seeds for you—which you are at liberty to distribute or make such use of as you deem proper. One paper contains a few *Angola Peas*. I send these, as I have never seen any at the North. We consider them a very delicate pea; they are quite prolific and hardy—delight in poor land and dry weather—require no sticking and do not run. The plant grows about 3 feet high; they should be sowed in drills 4 feet apart and 8 to 10 inches in the drill; the pod is about the size of a pipe-stem, and black when ripe, and should be gathered at least once a week after commencing to mature. They continue bearing till frost. Plant as soon as frost is over in the spring.

The other paper is the seed of the Dwarf Ocra; this being the first I have ever seen, it may be new to you. It is a great bearer—earlier than the tall varieties—grows from 12 to 18 inches high—pods ordinary size, and requires much less ground to supply a given quantity than the tall sorts. Sow in drills 3 feet apart and leave one stock in each place about 18 inches apart.

"Gombo" (a soup made of Ocra) being the "national" dish of our Creoles, we deem any improvement in its production important, and as some of your citizens may have learned the art of making it properly, and of course relish it, I consider it my duty to encourage the extension of its cultivation and use, for I do not believe there is any vegetable, if properly cooked, that can compare with it for usefulness or health, or as easily raised.

Besides its value as a vegetable, the ripe seed is the only substitute for coffee, which will defy the most inveterate coffee-drinker from distinguishing from the real "Simon Pure." If the seed be allowed age (say 1 year) before using, I do not believe one person in ten could designate it from the best *Rio*. It must, however, be carefully *parched*, and not *burnt*.

In making Coffee, we never boil it, but make it in a "greque" or dripper. By boiling, nearly all the aroma is lost, whereas by dripping in a tight vessel, nothing escapes, and you have all the rich flavor which naturally belongs to it. The strength of the beverage can be regulated so as to suit any taste; and last, though not least, it is by far the most economical mode of using it. As a good cup of coffee for breakfast is one of the most difficult things to be found, I will remark that the method pursued by us is to parch the berries very carefully, and on no account to allow a single grain to be burnt, for that will render the whole batch bitter. When parched, it should be kept in a close tin canister and only as much ground at a time as is wanted immediately; then dripped very strong.—Boil sweet milk well, but do not allow it to *scorch*; put ¼ part of coffee to ¾ of boiled milk in the cup, and then you will have such coffee as will be grateful to the palate. It should be borne in mind that coffee loses much of its virtues if kept long after being parched, and is nearly valueless if ground long before using. If, therefore, good coffee is wanted, parch frequently, and only grind when to be used.

Yours respectfully, "Creole."

[We thank our correspondent for the seed, which, when received, we will be happy to distribute among our friends who may desire to obtain them. We hope our correspondent will not neglect to fulfil his promise in his private note, to give us the result of his experiments, whether favorable or otherwise.—*Ed. A. Far.*]

Manure. Let the accumulation of manure be your principal object.

OF DIGESTED ANIMAL MANURES.

We continue the views of professor Johnston on animal manures. The following section is full of interest and instruction. The professor says:—

"Practical men having long been of opinion that the digestion of food, either animal or vegetable,—the passing of it through the bodies of animals,—enriches its fertilizing power, weight for weight, when added to the land. Hence, in causing animals to eat up as much of the vegetable productions of the farm as possible, it is supposed that not only is so much food saved, but that the value of the remainder in fertilizing the land is greatly increased. In a subsequent section we shall see how far theory serves to throw light upon these opinions." [In advance of giving our readers the section alluded to, we will say, that professor Johnson's theory has merely to recommend it, and that he sustains it by illustrations which we look upon as ingenious and philosophic.—*Ed. Am. Farmer.*]

Liquid Excretions.

The digested animal substances usually employed as manures are the urine of the cow and the sheep, the solid excrements of the horse, the cow, the sheep, and the pig, the droppings of pigeons and other birds, and night-soil. The liquid manures act chiefly through the saline substances they hold in solution, while the solid manures contain also insoluble matters, which decay slowly in the soil, and there become useful only after a time. The former, therefore, will influence vegetation more powerfully at first; the action of the latter will be less evident, but will continue to operate for a much longer period.

Urine.

Human urine consists in 1000 parts of Water	932
Urea, and other organic matters containing Nitrogen	49
Phosphates of ammonia, lime, soda, and magnesia	6
Sulphates of soda and ammonia	7
Sal ammonia and common salt	6
	1000

A thousand pounds of urine therefore contain 68 lbs. of dry fertilizing matter of the richest quality, worth, *at the present rate of selling artificial manures in this country*, at least 26*s.* a cwt. As each person voids almost 1000 lbs. of urine in a year, the national waste incurred in this form, amounts, at the above valuation, to 12*s.* a head. And if five tons of farm-yard manure per acre, added year by year, will keep a farm in good heart;—four cwt. of the solid matter of urine would probably have an equal effect; or the urine alone discharged into the rivers by a population of 10,000 inhabitants would supply manure to a farm of 1,500 acres, yielding a return of 4,500 quarters of corn, or an equivalent produce of other crops.

The *urine of the cow* is said to contain less water than that of man, though of course much must depend upon the kind of food with which it is fed. Reckoning then the large quantity of liquid manure that is yielded by the cow (2000 or 3000 gallons a year,) we may safely estimate the solid matter 1500 pounds weight, worth, *if it were in the dry state*, from £10 to £12 sterling. In the liquid state, the urine of one cow, collected and preserved as it is in Flanders, is valued in that country at about £2 a year. Any practical farmer may calculate for himself, therefore, how much real wealth, taking it even at the Flemish value, is lost in his own farm-yard—how much of the natural means of reproductive industry passes into his drains or evaporates into the air.

This liquid manure is invaluable, when collected in tanks, for watering the manure and compost heaps, and thus hastening their decomposition; but a great part of it may also be sprinkled directly upon the fields of grass and upon the young corn, [small grain] with the best effects. It must, however, be permitted to stand until fermentation takes place, and afterwards diluted with a considerable quantity of water, before it will be in the best condition for laying on the land.

Urate.

In order to obtain the virtues of animal urine in a concentraled form, the custom has been adopted of mixing burnt gypsum with it, in the proportion of 10 lbs. to every 7 gallons, allowing the mixture, occasionally stirred, to stand some time, pouring off the liquid, and drying and crushing the gypsum. This is sold by manure manufacturers under the name of *urate*. It never can possess, however, the virtues of the urine, since it does not contain the soluble saline substances, which the gypsum does not carry down with it. Except the gypsum, indeed, 100 lbs. of urate contain no greater weight of saline and organic matter than 10 gallons of urine. If it be true, then, as the manufacturers state, that 3 or 4 cwt. of urate are sufficient manure for an acre, the practical farmer will I hope, draw the conclusion,—not that it is well worth his while to venture his money in trying a portion of it upon a piece of his land,—but that a far more promising adventure will be to go to some expense in saving his own liquid manure, and after mixing it with burned gypsum, to lay it abundantly upon all his fields."

The concluding paragraph of professor *Johnston*, contains most excellent advice, and the farmer who may go to "some expense" in saving the liquid voidings of his stock, and of the members of his household, and take the trouble of composting them in the proportion of 400 gallons to 20 loads of mould of any kind, or an equal quantity of marsh or river mud, peat, or any kindred substances, and mixing with them 10 bushels of charcoal dust, or 1 bushel of plaster, will find in every 20 loads of such compost a sufficient quantity of manure to fertilize an acre of land on his estate; for such compost will be rich in all the elements which make up the food of plants, and impart fertility to the soil—*Ed. Am. Far.*

Wire Worms.—On taking possession of a piece of ground five years ago, for a garden—now in this city, but then upon the prairie—we found it infested with wire worms. They were present by thousands in every part of the soil, and the question was how to get rid of them. Two years after, we procured some refuse salt and sowed at the rate of 3½ bushels per acre, in the fall of the year. On working the ground the following summer the wire worms had taken themselves away, save a few stragglers, which have been gradually leaving ever since, till now there is scarce a solitary resident left. This would seem to say *salt them.*—*Prairie Farmer.*

The way to make a crop.—Manure with a free and generous hand, plough deep, pulverize your soil well, by harrowing, and rolling, cultivate clean, and unless the season is adverse, you cannot fail to make a good crop.

AMERICAN FARMER.

BALTIMORE, FEB. 1, 1852.

TERMS OF THE AMERICAN FARMER.

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At the *State Agricultural Society Rooms*, No. 128 Baltimore st. over the "American Office," 5th door from North-st.

☞The quarterly meeting of the officers of the Md. State Agricultural Society takes place on 4th inst.

☞In our next, we will give entire the memoir of Mr. Ruffin, noticed in our last.

"Old Fields," and "Young Beginner" are received—Answer to "W.C.R." relative to the discovery of phosphate of lime; and "P. H." are in type, but crowded out.

☞We intend as usual to offer premiums for the Farmer, to be closed at the usual time of the meeting of the State Agr. Society—we notice it thus early, for the purpose of informing those who may wish to compete, that by giving notice of their being competitors, all subscriptions received from the beginning of January can be included in the lists.

Guano Agency.—The N. Y. Journal of Commerce says that *Theodore W. Riley*, Esq. of that city, has been appointed the agent of the Peruvian Government for the United States, and "that the supplies may hereafter be expected proportioned to the demand." We have not learned that an agent has as yet been appointed for this State, by the general agent.

Wm. Gilham, Esq., Professor of Chemistry in the Virginia Military Institute, Lexington, Va., we are gratified to learn, has prepared himself for the analysis of soils, and is now at the service of the Farmers of Virginia, who may require his assistance. The Professor is a graduate of West Point; and has more recently been under the instructions of that accomplished Chemist, Professor Norton, of Yale College, Ct. and of our own eminent Chemist, Dr. Stewart, of this city—from whom we learn, that Professor Gilham bids fair to take a high rank in his profession. His analyses will be found *thorough* and *reliable*, and we congratulate the farmers and planters of Virginia, that the opportunity is thus afforded of having so valuable an aid in the furtherance of their efforts to resuscitate their lands.

To a Correspondent near Richmond, Va. To his inquiry, as to the *time* of returning the earth ploughed from the corn-plants, we reply, that it is immaterial, whether it be done at the time of turning the furrow from the plants, or whether the returning of it be delayed until after the whole may have been gone through with; some prefer one plan, some the other.

As he has asked our opinion of the plan he has communicated to us, as the one he intends to pursue in cultivating his corn crop the ensuing season, we are free to say, that we think most favorably of it. If the season should be propitious, he cannot fail to make a good crop. If, however, he manures "*heavily*," as is his intention, we think it would be best to leave two stalks in the hill, instead of *one*, as he proposes. By so doing, we think that he would make more corn to the acre.

We should be pleased if he would communicate to us the article on the culture of *Lucerne*, of which he writes. We beg to assure him, that the receipt of his letter gave us pleasure, and trust that he will often give us his views upon kindred subjects.

Sandy Point.—By the advertisement of Mr. Bolling, on another page, it will be seen that this valuable estate on James River, Va. is to be offered at public sale, without regard to weather, on the 26th May, if not previously disposed of at private sale—A valuable correspondent, "S." in our October No. has given some notice of this estate—but its fame is almost as extensive as the limits of our country—This tract is not surpassed by any body of land in any state of our Union—it is perhaps the only land of the *first* natural quality, and highly improved, that could be purchased at any price, in that particularly favored region—Lands are daily improving in value in most of the neighboring counties, where marl abounds, and stone lime is supplied at 6¼ cents per bushel. Capitalists, or farmers from the North, should have their attention drawn to this sale.

North Carolina Lands.—It will be seen by the advertisement of Mr. Burgwyn, of North Carolina, that he offers for sale a portion of his large estate, (the whole tract containing 45 to 4600 acres)—The description in his advertisement is so full, that little more need be said upon the subject—but any one desirous of more minute particulars, can obtain them from Mr. Obed Hussey, of this city, who having frequently visited this estate, where his Reaping Machines have been for a number of years in use, can impart additional information. To Farmers of Pennsylvania, New York, Jersey, &c. an opportunity is here offered, which should command their attention.

Peruvian Guano and Field Seeds—National Agricultural Warehouse, Washington City.—We would call the attention of such of our readers who may be more convenient to the Capitol of the Union than to our own city, to the advertisement of Mr. Fitzhugh Coyle, on another page, offering to farmers his large stock of Guano, Field Seeds and Agricultural Implements. Mr. Coyle is an enterprising dealer, and we have no doubt that farmers, planters and others will find him accommodating, and obtain their supplies on the most favorable terms.

LARGE YIELD OF WHEAT.—Dr. E. P. White, of Port Tobago, Caroline Co. Va. in the Port Royal Times of 15th Dec. furnishes, at the request of this and other journals, some particulars of a great yield of wheat made by him, and alluded to in our October No. page 143—from which we make the following extract:

"I mentioned the productions of our part of the State have increased one hundred fold in the last ten or fifteen years, and that the health of the Rappahannock has observed the same proportion I think from more thorough draining, liming and permitting the tide water lands to return to a state of nature. The general system on our river, is what I might designate as the four field system. The fourth field, the wood land, with some pasture or clear land attached. Some observe the three field, feed late and "under pasture," with stock herded. So you perceive, either of the systems permit the

partial use of clover, plaster and lime, and extensive use of whatever manure the farmer can produce.

"My necessities have compelled me to work my farm irregularly; my aim has been to lime and manure extensively, and bring the farm into good tilth. The use of clover and plaster as far as practicable, with lime and a partial use of guano. The lands upon which those heavy yields were made were absolutely rich naturally, a fine soil and increased by clover, plaster and the usual manure of the farm, and lime and ashes. The land had a very heavy crop of clover on it, which was turned down about the first of August, deeply—then crossed ploughed with double and single ploughs as the roughness of the land required, and seeded and harrowed the way it was last ploughed, which was the twentieth of September. The wheat, the Maryland blue-stem—quantity about one and a half bushels to the acre—the land a dark mahogany loam resting upon an unctuous clay, with ferruginous nodules interspersed—depth of loam from six to twelve inches."

SOULES WHEAT.

We have within the last few months seen various statements of a variety of wheat raised in the State of New York, and known there by the above name, and have felt it to be a duty we owe our patrons, to bring a few of these statements before them. Personally, we know nothing concerning it—nothing of its origin—whence it was introduced into this country—or why it should be entitled to bear the name of *Soules*—but, if its product be uniformly as great as the accounts we have from time to time read, it may be an object with wheat-growers in other States, to test its adaptation to their soils and climates. We shall now give a few extracts from the statements we have seen, and will merely remark, that the fashion of giving new names to old varieties of grain leads to confusion; the *same* variety being called by different names, and such happens to be the case with this, as it is in some parts of the State of New York known as the "*Seneca White.*"

SOULES WHEAT.—Mr. *John Hurlbut*, in a communication in the Patent Office Report, speaking of this kind of wheat, says:

"Hutchinson Wheat has been preferred to all other kinds; but for the past two years, it has found a successful competitor in a variety known here [Steuben Co., N. Y.] as the *Soules Wheat.* It is the general opinion among our best wheat-growers, that the latter will yield on an average, 5 bushels more than any other variety known."

Mr. *David M'Vean*, says:—

"Within the last six years, the *Soules Wheat*, a white variety, has been cultivated to some extent; and when the tillage is good, and the land is in good heart, it not unfrequently *out yields* the *Flint* from 5 to 10 bushels per acre. In many localities it is fast coming into favor and superseding the *flint.* It is about *a week earlier*, rendering it less liable to rust: it shells readily if not harvested in season, it does not withstand wet so well, the berry being but slightly covered with chaff."

In the *Rural New Yorker*, of the 25th ult., Mr. *M. C. Crapsey*, of Lockport, N. Y., gives a statement of having averaged 47 bushels per acre, on a lot of 7 acres, of Soules Wheat. The lot was in clover sod of 1 year's growth; he broke it up 8 inches deep in August 1850, rolled, harrowed, cultivated it, seeded it to 1½ bushels of Soules Wheat per acre on the 15th September.

The Agricultural Society of Niagara Co., N. Y., awarded the first premium, $20, to Mr. Hotchkiss, for 63½ bushels of *Soules* wheat, per acre, on a lot of 6¾ acres. The soil is mostly a black loam; the rest a gravelly soil. On the gravelly portion he spent 50 loads of barn-yard manure—the manure was spread the last of August, landed up into six pace lands, at the same time ploughing in said manure, then 40 bushels of slacked lime was spread over the field and thoroughly harrowed in. The whole produce of the 6¾ acres, was 385¼ bushels—per acre, 63½ bushels.—*Abstract from Transactions N. Y. Ag. So.*

REVIEW OF THE TOBACCO & GRAIN MARKETS.

Reported for the American Farmer by J. W. & E. Reynolds.

Since our report for December there has been some activity in the Tobacco market, and sales have been made of several hundred hhds. with little or no change in previous prices. At present the market is very quiet, as usual at this season of the year; the stock on hand is much reduced. We quote frosted $2½ a $3; oommon dark crop and seconds $3½ a $4; middling to good $4½ a $5½; good and fine $6 a $8; ground leaf $4 a $8, as per quality.

Wheat, red, 86 a 92c; white 90c a $1.05. Corn, white and yellow, 58 a 60c. Rye, 65 a 70c. Oats, 34 a 38c.

Flour—The latest news from Europe has had a favorable effect on the market, and an advance has taken place here—sales of Howard st. and Susquehanna at $4.37, and City Mills $4.37 a 4.50; family flour $4.50, extra do. $4.75 a 5—*Rye*, none in market, and in demand—*Cloverseed* has improved in price, and we quote prime at $5—*Provisions*, beef and pork, prices firm, it being now generally conceded that the hog crop is short, and that prices must advance—*Rice* $3¼ per 100 lbs.—*Sugars*, stock light; N. O. $4.50 a $6 for com. to prime—*Wool*, transactions limited, the weather preventing supplies from coming in; the Wool Grower, published in N. York, says the market has been buoyant, and that every thing now indicates an active market and high prices for the next clip—*Whiskey*, Pa. in hhds. 20; in bbls. 21 a 21½; Balt. bbls. 21½ a 22c—*Cotton*, firmer, and prices have advanced ¼c. within the last week; sales of ord. to fair Va., Georgia and Gulf, 7¾ cash, to 9¾c. 6 mos.—*Cattle*, beef, prices ranged from $3 to $4 on the hoof, equal to $6 a 7¾ net, and averaging $3.50 gross—*Hogs*, brisk, at $6½—The navigation being closed, but little business in produce has been transacted during the month past—the winter has been decidedly the severest since 1835—*Wood* has been very high; pine $5 and oak $6 a 6½ per cord—*Hay*, from wagons, $13 per ton—*Guano*, Peruvian, no change since our last; selling at $45 a 46, according to quantity; Patagonian $35 a 36; and Mexican $25.

Correction.—In Mr. Key's advertisement of his horse Beverly, in our last, the name of the dam of his horse was printed Ellen Horr, instead of Ellen *Hooe*—and in the notice of the same, on page 245, it is stated that he is descended from Priam and Musgrave, whereas it should have read Priam and *Margrave*. As it is important to breeders to have their pedigrees published correctly, it is deemed proper to make these corrections.

Maryland State Agricultural Society.

ENTRIES

Made at the Annual Exhibition for 1851.—*Continued.*

POULTRY.

Jno. C. White, of H. of Baltimore Co. entered a lot of Poultry, of various breeds, including a pair of Shanghai fowls—Luke Tierman Brien, of Balt. Co. Muscovy Ducks, and Poland top knot Chickens—Chas. A. Buchanan, of Balt. Co. Muscovy Ducks—Jno. Smith, of Balt. Co. 1 pr. Geese, and 4 pr. of Ducks—Zenos Barnum, of Balt. Co. Dorkings crossed with Jersey Blue and Shanghai; pure Cochin China; Shanghai crossed with Jersey Blue; English Pheasants, and a pure Game Cock—Allen Shipley, from Mr. Jno. Glenn's farm, 18 Muscovy Ducks—Thomas Gaddess, Balt. city, 1 basket Shanghai Eggs, 3 cages Fancy Pigeons, 1 pair Spanish black fowls, 3 do. Shanghais, 1 do. Golden Poland, 1 do. Java Game, 1 do Black Poland, and 1 do. White do.—C. D. Seys, Balt. co. 1 pr. white Muscovy Ducks—M. T. Goldsborough, Talbot co. 1 pair Capon Gobiers, 1 yr. old—Ed. Young, Howard co. 4 coops Poultry, 2 do. with Muffs, 1 Sipton, and 2 Irish Greys—Jas. N. Goldsborough, of Talbot co. 4 Capons, of 1 yr. old, of Shanghai breed, and 1 pr. Chinese Geese—Ed. M. Thimble, Balt co. a Bald Eagle, 1 yr. old—E. T. Ellicott, Balt. city, 4 Bremen Geese, game Cock and Pullets—Wm. B. Dobbin, Howard co. Jersey Blues, Seabright Bantums, a coop of Capons, White Dorkings, and a coop of White Guinea Fowls—Geo. D. Reese, Balt co. Chickens of the Canton breed, do. Poland do. and Muscovy Ducks—A. E. Roberts, Balt. co. 3 prs. Chickens, and 3 Ducks—E. T. Cook, Jersey Blue and other breeds Chickens—David S. Sumwalt, Balt. co. Native Turkeys, and Shanghai and Poland Chickens—Lewis Bailey, Fairfax co. Va. 8 China Turkeys—Jacob Kraft, Bantum top knot Chickens—M. Hutchins, Balt. city, 1 box Fancy Pigeons, and 5 coops Chickens—E. F. Cooke, Balt. city, 6 coops China Chickens—Mrs. E. F. Myers, Balt co. 2 pr. Muscovy Ducks—J. Jacob Bowers, Balt. city, 5 pr. Queens variety Cochin China fowls, 1 pr. Black Spanish do. 4 Spangled Polands, 1 pr. Eagle Fowls, 1 do. White Dorkings, 1 do. imported Chinese, 1 do. Silver Pheasants, 3 Java Bantums, 2 pr. White Polands, 1 do. Golden Pheasant, 3 Poland Ducks, 1 White Caull Duck, 1 pr. white Turkies, 1 do French Poodle Ducks, 4 pr. Gillus Bankiva; also poultry yards, containing 8 ornamental houses, 1 pr. Indian Geese, 1 do. Canada do. 1 pr. white China Geese, 1 pr. Java do. 1 do Rom. China do. 1 do African Geese, 1 do. Wild Barnicle Geese—T. Beeman, Balt., 1 pr. Bremen Geese—J. M. Turner, Balt. city, native Poodle Ducks, 6 Malay Ducks, 9 pr. native Turkies, and 1 pair Dorking Chickens—Henry Rodewald, Balt. city, 4 Bucks Co. and 4 Poland Chickens—John Hammersmith, 1 pr. white Shanghai, and 1 do. China Chickens, and 1 do. China and Bucks co. do.—Mrs. Saml. Sutton, Balt. co. 1 doz. common Ducks—Ellis P. Howard, 2 pr. China Chickens, China and Bucks Co. do. and 6 Ducks, of Poland and Rowen crossed—C. Carroll, of Howard co. 4 Capon Guinea Fowls, 4 do. Turkey Goblers, 1 Cochin China Cock, 1 do hen and chickens, and 1 cock and hen of Shanghai breed—Mrs. S. J. Somerville, Anne Arundel co. 1 pr. Muscovy Ducks—A. F. Murdock, Balt co. 3 Brazilian Chickens—Thos. Blagden, Washington city, 1 coop Shanghai Fowls, and 1 do. cross Shanghai and Jersey Blues—Saml. L. Tucker, Balt. co. 6 Jersey Blue Hens, 6 do. Pullets, and 1 Malay Rooster—Mrs. Fenwick, A. A. co. 5 pr. Shanghais.

VEGETABLE PRODUCTIONS.

By Wm. Jessop, Balt. Co. 1 bushel Mangel Wurtzel, 1 do. Timothy Seed, 1 doz. Turnip Beets, and 4 bushels Corn—Johns Hopkins, Balt. city, Sugar Beets, Vegetable Marrow, Mercer Potatoes, Carrots and Parsnips—Geo. Brown, Balt. city, 1 bushel Shaker's Potatoes—Allen Shipley, from Jno. Glenn's farm, 1 bushel white Corn, 1 do. yellow Corn—Jno. Smith, Balt. co. 1 box Beans, 8 varieties—Geo. D. Reese, Balt. co. 1 bushel Mammoth Corn, 1 do. Mercer Potatoes, 8 bunches Salsify, 5 do. Beets, 5 do. Carrots, 4 do. Parsnips, 1 doz. heads Cabbage, 6 bunches Parsley, 1 peck Tomatoes, 1 doz. Cape Brocoli, 18 heads Lettuce, ½ doz. Cucumbers, 4 bunches Radishes, 1 peck Lima Beans, 1½ do. Turnips, 1 dozen Martinese, 6 heads Savoy Cabbage, 1 qt. hominy Beans—Robt. Sinclair, Sr. Balt. Co. 1 bushel Mercer Potatoes, 1 do. Corn—Geo. Y. Worthington, Howard co. 1 bushel white Corn—Geo. W. Hughes, A. A. co. a sample white Wheat—Chas. Trump, Balt. city, 1 bushel Mercer Potatoes—J. H. Brown, Balt. co. 1 peck white Corn—G. W. Lurman, Balt. city, 1 bushel Yellow and 1 do. white Corn—Richd. Peters, Atalanta, Ga. a sample basket white Georgia Wheat—Walter Clements, Howard co. "Mountain Sprout" Corn—Saml. Wildesen, of Carroll Co. a sheaf of Wheat, 1 do. Broom Corn—David White, Cecil co. sample of Corn.

Also, by Wm. Jessup, 20 Pumpkins—by George Brown, 2 bunches red and white Celery—H. R. Watson, A. A. co. 2 Water Melons—Wm. Wilhelm, gardener to Jno. Ridgely, of H. Balt co. 12 bunches Celery, 12 heads Lettuce, 12 do. Endives, 1 bushel Turnips, and 1 bushel fine red Potatoes—J. W. Garrett, Balt. city, 1 doz. Turnip Beets, 1 doz. Long do. 1 do. Sugar do. 12 stalks Celery, 1 dozen Parsnips, 1 bushel Parsnips, 1 do. Turnips, 1 doz. heads Cabbage, 3 Pumpkins, 1 doz. ears Corn—J. H. Brown, Balt. co. ½ bushel Potatoes, ½ peck Beets, 1 peck Carrots, 1 do. Parsnips—Oden Bowie, Prince Gerge's co. Parsnips, Celery, Egg Plants, Winter Squashes, Pumpkins, long blood Beets, Turnip root Beets, Sweet Potatoes, Irish do. Beans and Peas—J. S. Fletcher, Balt. co, Sugar Beet, and Ruta Baga—Miss Rachel Smith, Balt. co. 1 box Peas, 4 varieties—Saml. Feast & Son, Cabbages, Egg Plants, and Tomatoes—Mrs. S. J. Somerville, of A. A. co. Egg Plants, Long Beets, turnip rooted do. Carrots, Parsnips, 6 varieties Beans, and Sweet Potatoes—B. C. Haward, Balt. co. Mercer, Berkshire, and Berwick Potatoes—W. H. Marriott, of Howard co. a lot of Potatoes—Jno. Owens, Middlesex co. Va. large cob corn, yielding largely of deep grains—P. Malcolm & Co. 3 lots Corn Meal—Saml. Sutton, Mercer Potatoes and Timothy Seed—Mr. Foxwell, St. Mary's co. 1 bushel Foxwell Wheat—A. & J. Brodie, Balt. city, long blood and turnip root Beets, Brocoli, Cabbage, Savoys, Carrots, Celery, Egg Plants, Onions, Parsnips, Seedling Potatoes, Squashes, Lima Beans, Marrowfat do. Oyster Plant, sweet Corn, Leeks, varieties of Tomatoes, Horse Radish, Lettuce, Spinach, Sprouts, Cayenne Peppers, large Peppers, Parsley, Thyme, Turnips, Mercer Potatoes, blue and white Cucumbers, Gumbo, Green Kale, Radishes, and hominy Beans—Mrs. M. D. Smith, 1 jar 5 yrs. old Mango Pickles, 2 do. other pickles—J. M. Turner, 1 lot Celery, 1 do. Tomatoes—J. Rampell, Frederick co.

lot Mercer Potatoes—E. Gale, of Kent, 1 bag of Wheat—Hy. Rodewald, 1 lot Mangel Wurtzel—Hy. Devries, Carroll co. 1 bushel Mercer Potatoes—Saml. Wildeson, Carroll co 1 bushel Turnips—Wm. Barringer, lots of Peas, Tomatoes, large size do. Anisa, Celery, Lettuce, Cabbage—J. W. Garrett, Balt. city, 1 peck Seedling Onions, and 1 dozen Carrots—Elisha P. Horne, Balt. co. varieties of native yellow Corn, Oregon do. and White prolific do.

TOBACCO.

By Otho Roel, a lot of Tobacco—Wm. D. Bowie, Jr. of P. George's co. 2 samples—W. M. Edelin, of Calvert, 1 sample—Geo. C. Morton, of P. George's co. 1 sample—Jas. A. Chesley, of Calvert, 1 sample—Wm. K. Barker, of Prince George's co. 2 samples.

DAIRY AND HONEY.

By Wm. Wyman, 1 box comb Honey—Mrs Curle, 5 lbs. Print Butter—L. Tierman Brien, 5 lbs. fresh print Butter—Jno. Smith, 5 lbs. fresh Butter, and 14 lbs. Salt do.—Hy. Frizell, 100 lbs. print Butter, and 1 firkin Salt Butter, 25 lbs., over 6 mos. old—Geo. Poe, Howard co. 2 boxes, 18 lbs. Honey—G. D. Reese, Balt. co. 5 prints Butter—J. W. Garrett, 5 lbs. Butter, and 10 do. Honey—Saml. J. Tucker, 10 gallons Ice Cream—Mrs. Mary Earle, of Queen Anne's co. 6 lbs. fresh Butter—Mrs. S. J. Somerville, 1 keg Butter, 6 mos. old—Saml. Sutton, 62 lbs. Cheese, and 6 do. Butter—W. D. Schurtz & Co. Balt. city, 4 Cheeses made by Mrs. Austin—Mr. Bingden, 1 hive of Honey—Mrs. R. Brooke, Jr. of Montgomery co. 1 print of Butter, 5 pounds do.

FRUIT.

[The Committee on Fruit, in their report of awards, presented a list of the contributors in this department; we therefore pass it over.]

FLOWERS.

By Dr. J. Dimmitt, of Balt. co. an Osage Orange Tree, for hedge fence—L. C. Hunt, of Balt. city, specimens of dried Grass—Wm. Burns, gardener to Col. Geo. W. Hughes, of A. A. co. a fine collection of cut Flowers—Hy. Rodewald, 2 Boquets, and a display of fine Dahlias—Wm. Corse, Balt. co. 7 boxes Dahlias, 7 stands Flowers, and 1 boquet Dahlias—Pentland & Bro. 1 table Floral Design, 1 lot fine Roses, and 1 of Dahlias—Saml. Feast & Sons, Balt. city, 1 Battle Monument Ornament, 1 Pyramid of Flowers, specimens Roses, Show Dahlias, and a collection of Plants in pots—Wm. C. Wilson, of Balt. co. specimens of beautiful varieties of Dahlias—Hy. Rodewald, 2 boquets, and a display of Dahlias—Edw. Kurtz, of Balt. city, 2 stands fine Dahlias—Jno. Feast, Balt. city, 1 Chandalier, ornamented, holding 33 Boquets, and a choice collection of new and the rarest plants in cultivation—Wm. Wilhelm, gardener to Jno. Ridgely, a large collection of cut Flowers.

DOMESTIC WINES, BOUNCE AND CORDIAL.

Mrs. P. Curle, 1 bottle Cherry Bounce—Jno. Boyd & Son, Balt. city, sparkling Scuppernong Wine, and sparkling Catawba Wine—Webb & Hopper, Wine and Cordial—Luke Tierman Brien, Currant Wine—Mrs. Wm. C. Glenn, Balt. city, home made Bounce and Cordial—Mrs. Harriet T. Boye, by T. J. Rusk, Currant Wine—Mrs. Jno. Merryman, Jr. Mint, Peach, Cherry, Lemmon and Cinnamon Cordial—Mrs. E. S. Myers, Balt. co. Peach Cordial, Blackberry Bounce, Mint Cordial, Currant Wine, and Grape Wine—Mrs. S. M. Devries, Carroll co. Currant Wine—Mrs. S. J. Somerville, Black Grape Wine, Cherry Bounce, and Blackberry Cordial—Jacob Kraft, domestic Grape Wine, 3 years old—Mrs. Wm. Adams, Currant Wine, 2 yrs. old—Mrs. L. Griffith, Currant Wine made in 1843.

BACON HAMS.

The following are the mottoes of the Hams deposited—names withheld:

No. 1, Tries Bien; 2, Baltimore Standard; 3, (not for competition;) 4, Lincoln Town; 5, Taste and try me; 6, Excelsior; 7, Compromise; 8, How d'ye like me; 9, Excelsior; 10, Hard to beat; 11, Cut and come again; 12, Comparison; 13, Pickwick Ham; 14, Try me; 15, Beauty is as Beauty does; 16, I ask no favors; 17, Off hand; 18, Best of all; 19, Union.

MISCELLANEOUS.

By Thompson & Taylor, 1 pair Carriage Hames, and 1 pair draught Hames—Jas. Cook, Chester co. Pa. improved horizontal Water Ram—Jas. Fowler, model of Wire Fence—Geo. Poe, a Clothes Washer and Wringer—Dr. Geo. Donaldson, of Balt. city, samples of Horse and Cattle Medicines, and a Patent Veterinary Truss—Thompson & Oudesluys, a cast iron Money Safe, a section of 6 inches vitrified Drain Pipe, 2 Gun barrels (connected) for water or gas pipes, bottle Ross' Metallic Paint, 1 jar African Guano, in its natural state, 1 do. do. mixed with lime—J. J. Lawn, Balt. city, Eagle Butter Machine—Richd. Lilly, Balt. city, set Dray Harness—Jas. Baynes, Balt. city, sheep skin Mats—E. Hubball, Balt. city, Hydraulic Ram—Thos. Baynes, samples Poudrette and Bone Dust—Michael Wolfinger, 1 box Churn—Mr. Van Arden, 6 Portraits Animals—Mrs. Yates, by Geo. F. Zimmerman, Peacock Fly Brushes—Lewis Lupton, Winchester, Va. a carriage body, resting upon Gutta Percha or India Rubber springs, and also self acting rubber, to be applied to either horses or driver indefinitely, or both at the same time—Lewis & Co. Washington, D. C. a lot of Paints—Ezra Whitman, 32 yds. drab Cassimere—Miss Olivia A. Marden, a crotchet Table Cover—J. L. Gatchell, Cecil co. Md. a miniature operating Water Ram—Wm. M'Kinstry, Washington, D. C. a double acting Forcing Pump, operating as a fire engine—Robins & Bibb, Balt. city, 3 Agricultural Boilers, and a Hathaway cooking Stove—E. Whitman & Co. a Hydraulic Ram, cast iron Hog Trough, and specimens of Draining Tile—Jas. C. Atlee, a cooking Stove—Knabe & Gaehl, Balt. city, 1 Piano—by Geo. Wilson, of Norfolk, 1 Chair—Thos. Tenant, Balt. city, improved Water Filter for hydrants.

HOUSEHOLD MANUFACTURES.

By Mrs. Pierce Curle, Counterpane, and Bread and Biscuits—Miss Eliza Jane Baile, of Carroll co. one Quilt—Mrs. Jas. O. M'Cormick, of Balt. city, Quince, Peach, and Apple Jelly—Mrs. M. A. M'Cormick, one Quilt—Mrs. Cornelia Creamer, Bed Spread, knit without a seam—Mrs. R. A. Dobbin, of Balt. city, varieties of preserved Fruits—Webb & Hopper, one Quilt, and Jellies and Preserves—Jane P. Graham, Balt. city, 10 varieties preserved Fruits—Mrs. Jacob P. Miller, by G. W. Dobbin, Quince Jellies, and preserved Pine Apple—Miss Anna Smith, of Balt. co. by Jno. Smith, linen Shirt, yarn Stockings, 4 kinds Preserves, Pound Cake, Sponge Cake, and Jelly—Chas. B. Calvert, of Prince George's, one Quilt—Mrs. Elizabeth Sumwalt, Balt. co. by D. S. Sumwalt, Album Quilts, and an Irish chain Quilt—Jno. Hinesley, Balt. city, a

worsted Quilt, containining 9,765 pieces—Miss Harrietta Randall, by Dr. G. S. Smith, Balt. city, 8 pair Socks—Miss Mary Jenkins, an embroidered Handkerchief—Dr. G. B. Smith, one Counterpane, 2 pair knit Hose, 1 Handkerchief, a glass Basket, lamp Mat, and Tidy—Mrs. W. C. Glenn, Balt. 1 Quilt—Mrs. Gen. Sewall, one knit Blanket, do. Shirt, do Window Curtain—Wm. Clare, Balt. city, for Mrs. Clare, home made Bread, Pickles, Preserves, Shirt, and Biscuits—G. D. Reese, 14 pieces home made Soap, preserved Damsons, Watermelon Rind, Apple Jelly, Quince do, frost Grape, do. spice do. Currant do. Potato Starch, Citron, preserved Limes, do. Canteleupes, and pickled Cucumbers—Miss Emma Sadtler, by P. B. Sadtler, one hair Wreath—Miss Margaret Brown, by J. H. Brown, Balt. co. a box Worsted Embroidery—one silk embroidered chair, and a silk Quilt—Mrs. J. H. Brown, 2 moulds Blanc Mange, and 1 jar Jelly—F. Robson, Balt. city, 1 pail and ½ bbl. Lard—Mary A. Kraft, by Jacob Kraft, Balt. city, 1 pair Ottomans, and 1 Quilt, Album—Miss C. Kraft, 1 Quilt—Miss J. Feast, 1 lot light Bread and Rolls, and raspberry and grape Jelly—Allen Shipley, by J. Glenn, Balt. city, 5 lbs. Butter—C. Shipley, by G. W. Lurman, Balt. co. 5 lbs. Butter—Miss Westwood, by G. S. Gaddess, Balt. city, 1 Quilt—Mrs. Matthew G. Clowl, by W. G. Clowl, one Quilt—Sarah Child, by same, 1 Quilt—Mrs. Thos. Taylor, by same, one Quilt—Mrs. A. H. Reip, by A. H. Reip, Balt. city, 1 pair Ottomans, 1 do. embroidered Slippers—Mrs. Elizabeth Sumwalt, by Dr. Sumwalt, Balt. co. decanters Tomato Catsup—Thos. D. Norris, Frederick co. 11½ lbs. roll Butter, made by Mrs. Rachel Norris—A. H. Reip, Balt. city one patent Bake Oven, 1 Bath Pan, 1 patent Swing, 1 infant's Bath, 1 Cowl for smoking chimnies, 6 bottles Furniture Gloss, 6 boxes Washing Powder, Mitts and Socks—Mrs. S. A. Hambleton, by T. E. Hambleton, Balt. city, a basket Bread and Biscuit—L. T. Brien, 1 lot of Soap—Miss E. Thomas, Southampton, Va. bottle Hair Oil, worked Cape, Reticule, pocket Handkerchief, worked Collar, and fancy Shirt,—Miss S. J. Sands, by S. Sands, Balt. city, 1 Quilt, Soap and Jelly—Miss Woollen, Balt city, a fancy Chair—Miss Anna Feast, a fancy Quilt—Mrs. Lamdin, Dorchester co. Md. 3 pairs fine long wool Hose—Miss Rebecca Dimmitt, Balt. co. 1 pr. fine wool Socks—Mrs. Mary M. Earle, Queen Ane's co. Md. 6 lbs. Butter, green Preserves, and Pound Coke—Mrs. Clement, preserved Apple Jelly, Cucumbers, Figs, Melons and Quince—Mrs. Ridgely, Preserves and Bread—Mrs. J. B. Matthews, Howard co. 5 lbs fresh butter—Miss Margaret B. Dorsey, Howard co. 1 Rug—Mrs. Rachel Dorsey, Howard co. 1 linen Table Cloth, home made—Mrs. Saml. G. Matthews, Howard co. 2 Counterpanes—Mrs. M. A. Bannerman, Balt. city, 1 fancy Shirt for child, 1 embroidered Velvet Sack, 1 braided Sack, and one fancy Reticule—Mrs. E. S. Myers, Balt. co. Sponge and White Cakes—Miss Julia Ann Vanbibber, Howard co. loaf Bread and Rolls—Miss Dorsey, Howard co. 1 Tidy—Miss Tubman, Howard co. winter Mittens—Miss Margaret Vickers, Dorchester co. 1 Counterpane, and 1 case Wax Flowers—Mrs. S. J. Somerville, quince and currant Jelly, and Apricot Marmalade—Miss Jane Feast, by S. Feast & Sons, 1 jar spiced Damsons, 1 do. Physalis preserves, and 1 do. pickled Tomatoes—Mrs. Lebrow, (65 years of age,) of Balt. co. 1 Quilt—Mrs. Wildgoss, Balt. co. 1 Quilt—Miss J. A. Cockey, 1 Shirt—Rev. Joel Blue, 6 prs. Hose—Miss Florence Jessop, aged 11 years, by Wm. Jessop, Balt. co. 1 Reticule, and one Lace Veil—Miss Milburn, 2 pieces Worsted Work—Miss Richardson, 2 skeins spun Silk—Mrs. Cheston, 1 Quilt, and 1 piece Embroidery—Miss Ware, Balt. co. 1 knit Neck Tie, 1 pair knit Slippers, 2 loaves wheat Bread, and Sponge Cake—Mrs. Withington, 3 cases moss Baskets—Mrs. J. Quinlan, by L. G. Quinlan, Balt. city, 2 Quilts, and a cloth Chair Bottom—Mrs. N. Darby, 2 Quilts—Mrs. M. Preston, 1 Rug—Miss Fahnestock, 1 Quilt and Cushion—Miss Anna Ridgely, 1 Quilt—Miss Manning, by T. Sheppard, fancy Lamp Shade, ornamented Bags, Lamp Mat, Watch Fob—Miss Sheppard, by T. Sheppard, two Tidies, and 1 crotchet work Table Cover—Miss Clarke, dish Jellies—Miss H. Smith, 9 years old, 1 Quilt—Miss Sidney, by J. Montell, 1 Bead Bag—Mrs. Brooke, lot of Soap and loaf Bread—Miss M. P. Brooke, 11 years old, a lot of Biscuit—J. W. Thompson, box Hominy—Mrs. Saml. Rankin, 1 Quilt—Mrs. R. Browse, Jr. 1 Quilt—Mrs. Prentiss, 1 piece Worsted Work—Miss Rebecca Russell, Apple Jelly—Mrs. Bryan, Cucumbers 3 yrs. old, and Watermelon Rind—Mrs. Capt. Sloan, peach and quince Jelly—Mrs. Haines, Carroll co. a lot of print Butter, 1 Cheese and loaf home made Bread—Miss Haines, 1 knit Tidy—Miss Louisa Knode, Washington, D. C. 2 samples Domestic Soap.

[*To be continued.*]

CHARCOAL, PLASTER AND GUANO.

A subscriber asks us—"*if any combination of Charcoal, Plaster and Guano will make a profitable top-dressing in the spring for wheat?*"—to which we reply,—that we believe it would. In our climate, we should be opposed to all topical applications of any strongly concentrated manure like guano, by itself,—and, indeed, we should, under all circumstances, prefer to have it ploughed in, if practicable; but as we presume our correspondent has been prevented, by circumstances, from using guano at the time of ploughing for wheat; and of course, must avail himself of the next best plan of deriving benefit from its use, we would advise him, next spring, as soon as the frost is out of the ground, and it in a state to bear a team, to mix, in the proportion of 100 lbs. of guano, 1 bushel of fine charcoal, and 1 peck of plaster per acre, then to sow the mixture over his wheat field, lightly harrow the ground, and finish by rolling, and we have no hesitation in saying, that his wheat crop will be benefitted more than twice the cost of the manure. We say to him farther, that he need not fear injuring his wheat plants by the operation of harrowing and rolling; for on the contrary, it will act as a working, and prove of decided advantage. We feel very certain that the admixture of charcoal and plaster with guano, together with the covering it will receive by the harrowing, will prevent any material loss of the ammoniacal principles of the latter; as independent of the affinity existing between charcoal, plaster and all nitrogeneous bodies, they will be greatly aided by the vital principle of the plants themselves. We are not, however, left to the lights of theory alone, in this matter, but have the experience of the Honorable Mr. *Pearce*, of Kent county, of this State, to guide us to a practical result,—he used, some years since, a top-dressing of guano and plaster upon his wheat field, and was rewarded by a large increase of crop.

AMERICAN REAPERS IN ENGLAND.

Some few months ago we noticed the trial of Reaping Machines at the World's Exhibition, London, where it was stated that M'Cormick's Virginia Reaper had borne off the gold medal, one of the highest prizes offered, in consequence of his success in a competition with Hussey's Baltimore Reaper—We have subsequently received various English publications, giving details of trials made since the one alluded to, in which our townsman's Reaper appears to have attracted great attention, and met with much success—Mr. Hussey has recently returned home, and issued a pamphlet containing extracts from English papers, descriptive of the working of his machine, and more particularly of the trial which took place between his Reaper and that of Mr. M'Cormick, in a contest induced by a challenge thrown out by the agents of the latter.

It appears, according to the pamphlet before us, that after Mr. Hussey arrived in England, and had tested the capacities of his Reaper in various localities, that the public mind in England had become aroused to the subject, and an impression began to prevail, that the award of the medal was unjustly, or prematurely made:—this seems to have induced the agents of Mr. M'Cormick to throw down the gauntlet to all inventors of similar machines, which was promptly taken up by Mr. Hussey's, and the trial made—the result will be found in the annexed statement:

From the Morning (Eng.) Advertiser, Sep. 12, 1851.

On Monday last the public trial of Hussey's patent Reaping Machine took place with the permission of his Grace, the Duke of Marlborough, on his Grace's estate of Blenheim, near Woodstock, Oxfordshire, and also, on the adjoining one of Mr. Southern, one of the most considerable landed proprietors of the country. A large assemblage of Agriculturists of the highest class, attracted by the celebrity which this ingenious and efficient contrivance has acquired for itself in a course of successful experiments performed last week in Yorkshire, were present to witness the trial, mostly from Oxfordshire and the adjoining counties, but many from a considerable distance, and all of them concurred in the most ready acknowledgements of its advantages.

The reaping commenced at eleven o'clock in the barley field, the machine being drawn by two fine chesnut horses, lent by his Grace for the purpose of the experiment, in which he took the deepest interest, following the reaper in a car, and watching with evident satisfaction the ease and rapidity with which the blades cut down the golden produce of the field. The crop was by no means one calculated to favor the experiment. On the contrary, some of it was down and much laid. It was cut down, however, with great regularity and speed, and the general evenness of the stubble was the subject of general remark. As the machine passed on, hewing its way at a smart pace through the dense mass of stalks, the crowd of eager observers rushed after it, and many were the cheers with which it was welcomed. Occasionally, to satisfy the ideas of the more fastidious, the level of the cutters were changed so as to leave a greater or less length of stubble, as was desired, and it was evident to all that in this respect the machine was susceptible of the nicest adjustment. Sometimes at the end of a turn it was rested to give the farmers an opportunity of inspecting it, which they seemed never tired of doing, and then the machine was turned round at right angles to cut in the cross direction. In the experiment upon barley it showed itself capable of reaping the enormous space of 15 acres, which we believe is from eight to nine times the power of the most vigorous and skilful reaper. Afterwards the machine was taken into a large field of clover, which it cut to within two inches of the ground, and with still greater rapidity.

His Grace repeatedly expressed his admiration of the powers of the apparatus, and congratulated some of the agricultural gentlemen present with him on the prospects of greater economy and security in harvesting which it afforded them. These opinions were generally entertained upon the ground, and yesterday, at Bishop's Stratford, in Hartfordshire, the farmers of that part of the country witnessed a similar experiment, attended with results precisely similar, and which gave them the same satisfaction.

The following Testimonial was given by the Duke of Marlborough:

TUESDAY, Sep. 9, 1851.

Having yesterday, witnessed the working of the American Reaping Machine, patented by Mr. Hussey, and being requested to give my opinion upon its execution, I state that it performed its work admirably, laying the corn when cut very neatly for tying up, and leaving the stubble very regular.

MARLBOROUGH.

Following upon these various successes, an advertisement from the proprietors of McCormick's Machine, appeared in the public papers, as follows:

MR. M'CORMICK'S AMERICAN REAPER.

Public Challenge to Makers and Venders of Reaping Machines.—We, the undersigned, agents for Mr. M'Cormick, having observed sundry advertisements and circulars complaining of the decision of the Jurors of the Great Exhibition of 1851 in favor of M'Cormick's Reaper, and of the reports given in the public journals of the trials which led to such decision, do hereby give notice to Messrs. Wm. Dray & Co., Messrs. Garrett & Son, Mr. O. Hussey, and all other makers and venders of reaping machines whatsoever, that M'CORMICK'S REAPER will be tried at the Cleveland Society's Show at Marton, Middlesboro', near Stockton-on-Tees, on the 25th inst., and publicly CHALLENGE them or any of them, to meet us there with their machines, for the purpose of a comparative trial of the merits of each, to be determined by the Chairman and Council of the Cleveland Society, or by such Judge or Judges as the said Society may appoint.—BURGESS & KEY, 103 Newgate-street, London.

The Challenge was immediately accepted.

MR. HUSSEY'S AMERICAN REAPER.

"In answer to an advertisement which appeared in *The Times* of the 18th, from Messrs. Burgess & Key, giving us a PUBLIC CHALLENGE, to a TRIAL of the AMERICAN REAPING MACHINES, we hereby announce that we shall willingly ACCEPT the SAME, and on the 25th inst. we shall be prepared at the Cleveland Society's Show, Marton, Middlesbrough, near Stockton-on-Tees, to prove to the Agricultural World the superiority of HUSSEY'S REAPER, for general farming purposes. We stipulate, however, that the Machines shall be tested, not only on a particular patch of good upstanding grain, where they might, perhaps, prove equal, but on an average variety of

condition, as to short and laid corn, &c., such as the farmer will usually meet with. Its capabilities for cutting green crops, such as clover, &c., shall also be proved. It must be evident to the Farming Public, that the Reaping Machine which will cut a crop of the greatest variety and difference of condition, must possess the greatest merit.—WM. DRAY & Co., Agricultural Warehouse, *Swan-Lane, London-Bridge.*

Accordingly the matter was arranged, and the following gentlemen were called upon to act as Jurors:

Henry Stephen Thompson, Esq. of Moat Hall, *Foreman;* Mr. Wm. Lister, of Dunsa Bank; Mr. Jno. Parrrington, of Brancepeth; Mr. Wm. Wetherell, of Kirkbridge, Darlington; Mr. Robt. Hymers, of Marton; Mr. Christopher Cobson, Linthorpe; Mr. Robt. Faweitt, of Ormsby; Mr. Joseph Parrington, of Cross Beck; Mr. John Outhwaite, of Bainesse; Mr. George Reed, of Hutton Lowcross; Mr. Thos. Phillips, of Helmsley, and Mr. Thomas Outhwaite, of Bainesse.

The following were the conditions to be submitted to by the representatives of the respective machines:

"The machines to be tried on wheat and barley, in such order, and for such lengths of time, as the jurymen direct. The jury to have full power to use any means they deem advisable, to put the machines to the severest trials. The jury, in deciding on the merits of the two machines, to take into their consideration:

1st.—Which of the two cuts the corn in the best manner; 2d.—Which of the two causes the least waste; 3d.—Which of the two does the most work in a given time; 4th.—Which of the two leaves the corn in the best order for gathering and binding; 5th.—Which of the two is best adapted for the ridge and furrow; 6th.—Which of the two is the least liable to get out of order; 7th.—Which of the two at first cost is the least price; 8th.—Which of the two requires the least amount of horse labor; 9th.—Which of the two requires the least amount of manual labor."

No report was made of the trial on the first day, but published accounts gave the palm to Hussey.

The *Gateshead Observer*, of Sept. 27th, says:—

"It was curious to see on the soil of a Cleveland Farm, two implements of agriculture lying side by side in rivalry, respectively marked—M'Cormick, Inventor, Chicago, Illinois"—"Hussey, Inventor, Baltimore, Maryland"—American competing with American, on English soil!"

[We cannot spare room at present to give the various accounts of the trial, as published in the English journals, and must therefore content ourselves with the following report of the Judges:]

WEDNESDAY, OCTOBER 1.—The Marquis of Londonderry, and several other gentlemen, have visited Mr. Fawcitt's farm to see the machine at work.

The laurels so recently placed upon the brow of Mr. M'Cormick, have been plucked off—not wholly, but in great part—by his fellow countryman, Mr. Hussey.

We would enlarge upon this theme, but our report has left us little room. We will only say, that while the farmers of Cleveland, and of the Island generally, are turning their attention to agricultural improvement,—by reaping machines, draining ploughs, and steam ploughs—we would say to them, in the words of Mr. Hussey to the Cleveland horse-jockey, when his machine was ready for its work—"NOW, THEN, GO AHEAD!"

REPORT OF THE JURY.

"The Jury regret exceedingly the most unfavorable state of the weather on the days of trial, (a perfect hurricane raging the whole of the first day,) and their consequent inability to make so full and satisfactory a trial as they could have wished.

"The Machines were tested on a crop of Wheat, computed at 25 bushels per acre, very short in the straw, and if possible, more laid than the Wheat.

"The Jury, taking the different points submitted to their consideration, in the order as mentioned:—

"1.—Their unanimous opinion, that Mr. Hussey's Machine, as exhibited by Messrs. Wm. Dray & Co. cut the corn in the best manner, especially across ridge and furrow, and when the Machine was working in the direction of the corn laid.

"2.—By a majority of eleven to one, that Mr. Hussey's Machine caused the least waste.

"3.—Taking the breadth of the two machines into consideration, that of Mr. Hussey did most work.

"4.—That Mr. Hussey's Machine leaves the cut corn in the best order for gathering and binding. This question was submitted to the laborers employed on the occasion, and decided by them, by a majority of 6 to 4.

"5.—Their unanimous opinion that Mr. Hussey's Machine is best adapted for ridge and furrow.

"6.—This question was referred by the Jury to Mr. Robinson, foreman to Mr. Bellerby, of York, a practical Mechanic, of acknowledged ability, whose report is appended below.

"7.—That Mr. Hussey's Machine at first cost is less price.

"8, 9.—The Jury decline to express a decided opinion on these points in consequence of the state of the weather.

"The trials took place on the farm of Robert Fawcitt, of Ormesby, near Maribro'-on-Tees, who in the most liberal and disinterested spirit allowed his crops to be trodden down and damaged to a very great extent, especially on the 25th, when in spite of the storm an immense crowd assembled to witness the trials.

"The Jury cannot conclude their Report, without expressing the great pleasure they have derived from seeing two machines brought into competition that were able to do such very good work, and also at witnessing the friendly, straightforward, and honorable way in which the Exhibitors of the respective machines met on the occasion.

Signed on behalf of the Jury,
W. F. WHARTON, Foreman.

Mr. Robinson's Report on Question 6.

Having carefully examined the two machines, and given the subject due consideration, I am of opinion that M'Cormick's Reaping Machine, as at present made, is most liable to get out of order.

(Signed,) THOMAS ROBINSON.

York, 30th September, 1851.

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[It is but justice to Mr. Hussey that we publish the following explanation which he makes as to the cause of the failure of his machine at the first trial made before he arrived in England, when Mr. M'Cormick received the award of the medal:

"That farmers who are acquainted with my Reaper may understand why it failed to perform well in the hands of strangers at the Exhibition trial

where M'Cormick got the medal, it will be necessary for me to say, that when the machine was sent from Baltimore it was to cut high. That when the inexperienced hands undertook to make it cut low, they pitched down the cutters by putting on the tongue, not knowing any other way to lower it. In doing so the hind part of the platform was of course raised high. In this condition, the unpracticed raker failed to push the heavy wet wheat off up an inclined plane, and as a matter of course the machine choaked, and for the same reason that a mill will choak when the corn goes in faster than the meal comes out. A skilful hand would have lowered the cut at the axle of the machine, and brought the platform horizontal or lowest at the rear, as it should be in cutting wet grain."]

CULTURE OF ASPARAGUS.

BARNESFIELD, Hampstead, Va.
Dec. 22d, 1851.

To the Editor of the American Farmer—

SIR:—I promised you some seed from the asparagus sent you last spring, and I think, if you requested it, an account of my mode of cultivation. The seed I have for you, and refer your "Lady Subscriber" of Petersburg, and you also, to the 27th page of the "Southern Planter," December, 1841, No. 11 and 12, for the very best way to form new beds that I know of, viz: that there given by Gen. Wm. H. Richardson, of Richmond, Va. It is the one I adopted and by which I have succeeded in raising such asparagus as I sent you, and I doubt if you ever saw much better. I vary in my treatment a little from him, because I use the river grass from the (salt) Potomac to a great extent, as manure.

Let any one plough out a trench as deep as they can, or wish, in the spring, strew some good manure all along its bottom, then set the roots a foot apart in the trench, and cover them with earth—work and keep clean during the summer, gradually ridging at every working—in the fall cut or bend the tops down and cover the ridge well with good stable manure and long litter, (I also cover all over with the river grass)—in the spring take a plough (I use a two-horse) and split the bed down to the roots, almost, (or quite, if you can't help it)—fill the furrow with well-rotted stable manure, (here again I use the "sea ore" to fill up,) and then throw, with the same plough, the earth into and upon the furrow until it is well ridged up and the ploughing extended as far each side of the centre as is necessary for keeping the ridge clean, then draw the ridge up just as high as can be done with hoes, and you have an asparagus bed that can be dressed up in the same way every spring in an hour or two, and which will furnish the very best asparagus that the kind planted can furnish, from the simple fact, that the sprouts have earth to grow through, and not the old-fashioned manure beds, as dry and hot as hot-beds.

One row alongside of the garden fence is all sufficient for a family, but any number of rows can be made, say four feet apart, each one to be treated as above, fall and spring, manure scattered over the whole ground, which can be ploughed in as the beds are ploughed up in the spring.

Yours resp'ly, ABRAM B. HOOE.

The thermometer at Black Rock, near Buffalo, N. Y. was 17 degrees below zero on 20th ult. At Pittsburg 15. At Baltimore 6.

PEA CULTURE—BONE DUST, &c.

HENRICO Co., Va., Jan. 1852.

To the Editor of the American Farmer—

I am a subscriber, Mr. Editor, to your valuable periodical, and a constant reader of its pages. In the January number for this year I was much pleased with the valuable paper of "Bruington" on the Pea Culture, and only regret its brevity.—Wishing to obtain some further information, I take the liberty of propounding a few enquiries to him.

What is the earliest period at which the Pea may be sown in this region without danger from frost? (1) and if frost should fall on the young pea, would it be likely to be killed or materially injured? In this region (head of tide water) would it be possible to turn in two crops of peas, as improvers for wheat, by early sowing—and if so, could it be done with the "yellow clay Cow Pea, or Yeatman," as he calls it, which has a much larger growth of vine than the Black or Stalk Pea, but is not so quick of growth?(2) What is a sufficient quantity of each of the varieties, the Yeatman, Black and Mexican Pea, necessary to the acre in order to secure the best and heaviest growth of vine to be turned in, not sown among corn, but on a fallow?

Why is it that the pea, which is beginning to be extensively used as an improver in place of clover, or as an adjunct, is not produced in larger quantities by the farmers of Lower Virginia, whose soil and climate is so admirably adapted to its cultivation? Peas last spring were selling here as high as 75 and 80 cents per bushel, which it seems ought to make their cultivation an object below.

The Mexican Pea—is it lately introduced, and does the soil, climate, or mode of cultivation of this variety materially differ from those of the other varieties? Could it be obtained in large quantities in the markets of Baltimore or Norfolk?

These enquiries are addressed to the kindness of "Bruington," in the hope that he will not find it inconvenient to answer them. And if you, Mr. Editor, have the requisite information in your possession, you will confer a great favor by communicating it, or so much as you may have.

Might I also ask whether bone-dust heaped in bulk (large) would *heat*, and if so, would it be injured; and if not injured, for how long a time would it remain bulked without injury, under cover, of course?(3) How would bone-dust do, if used as a top-dressing, in the spring, on wheat? and should it be rolled or harrowed in or not? and how much to the acre?(4)

Could soap-boilers' ashes be used economically on clover in the spring, or would it be wasted by being washed off by rains?(5)

By answering these enquiries, which a subscriber hopes may not be deemed impertinent, you will confer a great favor on AGRICOLA.

Replies, in part, by the Editor of the Amer. Farmer.

Deeming the *pea-culture*, with the view of improving worn-out lands, one of vital importance, we sincerely hope that our friend "*Bruington*" will reply fully to the inquiries of our correspondent, "*Agricola*," as living, as he does in the pea region, and having given the subject much attention, his ability to treat it well, is far superior to ours. But as we have been appealed to, to answer such parts as we may have the "requisite information" to qualify us to reply to, without assuming that we are possessed of that degree of information that would entitle us to say that it came up to the standard of

"*requisite*," we will give, what we may, to the best of our judgment.

1. The Pea is a very hardy vegetable, and may be sown as soon as the frost is out of the ground, and the weather becomes settled. We have had the Green or Garden pea planted, and up 4 or 5 inches high, and yet live through a fall of snow, and yield a good crop.

2. We have had no personal experience in the culture of the varieties of peas named, but judging from our knowledge of the nature and habits of the pea family, we feel no hesitancy in saying, that two crops could be grown and ploughed in the same season, in time for wheat, provided they were ploughed in when in bloom, the period at which they should be turned under; and we will say further, that grounds thus treated, though poor before, with the aid of a few bushels of ashes and lime, to the acre, if the soil was adapted to its growth, would produce a good crop of wheat, and bear being seeded to clover.

3. "Bone-dust heaped in bulk, (large,)" will heat, but if treated properly, the heating will be no disadvantage to it. It is from permitting the heat to be carried to excess, that injury is to be apprehended. In preparing bone-dust for use, if it is not intended to be decomposed by Sulphuric acid, the plan would be, to *intimately mix* 2 bushels of ashes and half a bushel of salt, with every bushel of bone-dust, throw the mass into a compact bulk, and every few days thrust a stick in to test whether it has become hot—if *hot*, the bulk should be shoveled over, to repress the *excess* of heat.—Heating excites an incipient state of decomposition, which is promotive of the efficient action of bone-dust, but if carried to the point of charring, much of its value might be impaired, by destroying the gelatinous portion of it—that portion which creates ammonia. It will favor the decomposition of the bone-dust, to moisten it before mixing and throwing it into bulk with the ashes and salt.

4. Bone-dust, prepared as above, would make an admirable top-dressing for wheat in the spring. It should be harrowed *lightly* in and the wheat then rolled. If not harrowed and rolled, it should at all events be rolled in. Three bushels and a half of such mixture would be a good dressing for an acre.

5. We believe that soap-boilers' ashes could be used economically on clover in the spring, and we should not apprehend any material waste by the rains would occur—certainly none if the application was delayed until the clover began to put out its leaves; but if any wastage was likely to occur that could be prevented by passing the harrow and roller over the field after the top-dressing of ashes had been given to the clover. These processes would greatly benefit the clover. In addition to the ashes, however, we would dress the field with a bushel of plaster per acre.

Guano and Bones—Prices in England.—The Liverpool Mercantile Gazette, Dec. 29, quotes Peruvian Guano at Hull, at £9.10s. per ton, (of 2240 lbs.) equal to $48.50, here, including exchange—Bones, £5 per ton, equal to $25 here—The estimate of the latter article in England, compared with this country, may be determined from the fact, that our bone dust manufacturers pay for the bones in the rough $12 to $14 per ton, and sell it ground at $22.40 per ton, being less by $2.60, than the rough bones sell for in England.

LANDS IN HENRY COUNTY, VA.

MARTINSVILLE, Henry Co. Va.
Dec. 25, 1851.

DEAR SIR:—Enclosed is one dollar, for which you will send me the American Farmer for the year 1852. During the present year I have been a subscriber to your paper, and assure you I would take it the next, if your price was $5. Farming is not my profession; for ten years I have been practising law, and have placed myself, by my profession, in a situation to buy a small farm, and hands to till it, and at the beginning of 1851, began upon a small place with five hands and ten horses, and I have cribbed one hundred and twenty barrels of corn, made about 5000 lbs. of fine tobacco, and stopped 400 yards of the most *distressing* gullies. I have now about one-third of my corn ground broken up with a large two-horse plough, and a subsoiler following in the furrow, and whilst the shift I am tending now for the next corn crop is a thin one, I am in pretty good spirits, and know at least that I shall make more upon it than has ever before been made on the same field. This the deep ploughing alone would effect; but I shall apply all the manure I can make in my farm pens, and by hauling creek muck. The misfortune with the farmer in this region is, he cannot afford to buy the costly manures; the freight is too heavy; and tobacco being our principal staple, will not justify it, at the present low prices. Would you plough an exhausted spot, in other words, what we call "a galled spot," with a large two-horse plough and a subsoil after it? Will it not make such a place even poorer than it was before? I am an advocate for deep ploughing, but think it ought to be gradually introduced upon worn-out lands.

But, Mr. Editor, in this county of Henry, we have a soil inferior to none in Virginia in fertility. It is principally a stiff and greasy red clay, upon which a small quantity of manure has a most surprising and lasting effect. But notwithstanding the fertility of our soil, it has been greatly deteriorated by the bungling manner of its cultivation. We want more numbers of such journals as the American Farmer, to correct, and, in fact, remove the prejudices of our fathers in reference to farming. Our lands, too, can be bought low, and if their fine quality were generally known, I have no doubt they would soon get into the hands of good farmers and be greatly enhanced in value. The average assessed value of lands in this county, last year, was $4.44, while some, though I assure you not much, was valued at $12 per acre; and I have seen lands not so good as this latter, sell on James River for $50 per acre. The leather wood lands of this county are better than the James River lands, and yield, with a cultivation much inferior, nearly as heavy crops.

I did not, however, when I began, intend to say so much; my object was to send you the subscription for the next year, and to enquire of you, at what price I could get, in Baltimore, a machine for crushing the corn and cob together? My farm and force is a small one, and a small crusher would, therefore, answer my purpose. You will confer a favor upon me by answering my question in the way most agreeable to you. You may do so by letter, or in your paper, provided my name does not get into print. I have some aversion to that. At some leisure time, I may perhaps amuse myself by writing some communications for your most ex-

cellent journal; but this will be when attention and practice have made me a scientific farmer, and even then, they shall be under your correction.

Very respectfully, yours, &c.

I will thank you to inform me whether or not a small crusher will require horse power, and whether, after being crushed, it will still require grinding?

REPLY BY THE EDITOR OF THE AMERICAN FARMER.

We do not apprehend that the "*galled*" spots of our correspondent would be injured by the ploughing of a two-horse plough, followed by a subsoil plough. It would be well, however, for him to give to such spots a liberal dressing of manure.—Any grounds that are not surcharged with water, will, in our opinion, be benefitted by deep ploughing as well as by subsoiling; but if reduced by improvident culture, they should be assisted by manure. Prudence would dictate that all deepening of the surface soil should be gradual, though we confess we do not participate in the fears too generally entertained upon this subject by those who have been the advocates of shallow ploughing. If nutritive manures be applied at the time of increasing the depth of soil and ploughed in, and a top-dressing of lime be also given, (if the subsoil turned up should indicate the presence of iron in a low state of oxidation,) we should not apprehend any bad results.

Corn and Cob-Crushers are worked by horse-power, and can be obtained for from 45 to 60 dollars, according to size. The resistance offered by the corn and cob is too great to be overcome by man-power. After being crushed, it will not require grinding.

FLORAL DEPARTMENT.

Prepared by John Feast, Florist, 279 Lexington st. for the American Farmer.

The present month will be quite interesting to the Florist, as plants are coming into bloom; especially *Camellias*—this is the month for this favorite tribe; they will require good supplies of water, and to be frequently syringed—a steam should be raised by throwing water over the furnace or flues, (if heated in this way,) which is an excellent method to keep down the red spider, that is so fatal to the camellia, and moisture is the most certain remedy against them. Fertilize if you wish seed. and march if a fresh stock is wanted.

Azaleas—Water more liberally as they begin to grow, and near the time of flowering.

Pelargoniums will require their proper sized pots for flowering; as they begin to grow, keep the branches well down near the pot, so as to make a handsome appearance when in bloom; this only can be effected, when growing, to train them to perfection—Keep them as cool as possible, so that they are not forced into growth too early; be careful and not over water, but keep them rather dry—by this method fine roots are obtained before new shoots are thrown out, which will ensure a fine bloom, if properly managed the remainder of the season; fumigate and keep the plants clean, so that they will show a fine expanded foliage.

Roses intended for early bloom, will require a little more heat, if they have been kept back; repot all such as require large pots—propagate from cuttings, and grafting, which is generally done at this time.

Epacrises, Lechenaultias, Diasmas, Tremandras, and many other beautiful cape plants, should be properly attended to—pinch off the tops to make them throw out side shoots, which makes bushy plants; propagate when the young wood is sufficiently ripe, and repot all such as need larger pots, but give plenty of drainage.

Chinese Primroses, Mimuluses, Pansys, Schizanthus, &c., should have larger pots, if not shifted before; give them plenty of air, and occasionally water with liquid manure, which is beneficial to all plants.

All the *creepers* will require particular attention to train, as they grow to rods or trellises, as Passion flowers, Stephanatus, Ceropegias, Ipomeas, Tecomas, Wax plants, &c. They are the greatest ornament to the hot bed and Greenhouse, and should be more extensively cultivated; they are easily propagated from cuttings or layers, and deserve a place in every collection of plants.

Prepare an early hot bed for sowing seeds of different kinds for planting out early, and when sufficiently large, repot in small pots to turn out in the borders, which gives a succession of bloom through the summer. *Dahlias* of the choisest kinds might be started by propagation, by being placed in some warm situation to cause them to grow to obtain cuttings.

Japan Lillies, Amyrilluses, Crinums, Glorisa superba, and such bulbous rooted plants as are intended to start into growth early, should be repotted, but some might be left till next month, if not required at this time; give a mixture of good loam; leaf mould, and a little manure and sand, with plenty of drainage and pot room.

Greenhouse plants of all kinds, require the same attention in keeping them clean—some will require repotting, while others need only a top dressing and tieing up as they make their growth.

IMPROVEMENT OF A SOIL ORIGINALLY POOR.

KINGSTON, Tenn., January 10, 1852.

Dear Sir:—Your paper affords me great gratification; the general tone of it accords very much with my feelings—it affords many suggestions in time of need. You will find enclosed a $1 note, which will pay my subscription till the first of July, 1852.

I should like to get some information by you about a new ground field—how I ought to manage it the best to get it improved. The field contains about five acres of very thin soil, producing in the best season not more than about seven or eight bushels to the acre; the arable land of one-half of it is about 4 inches deep,—that of the other half not more than two inches. The subsoil consists of a stiff white clay, mixed with slate gravel. I thought that I would put it in oats next spring, and seed it with clover and timothy and keep it as a pasture for two or three years, till the roots get mostly rotted, and then turn it over. I wish you would give me your advice about it, how it should be managed. I am respectfully yours,

LEWIS BLOOMFIELD.

Reply by the Editor of the American Farmer.

The soil described by our correspondent is a very difficult one to *cure* of its sterility, for there is so little *surface* soil in one portion of it—only two inches in depth—that, to improve it, it will be necessary, almost, to create a new soil. *White clay* is generally poor and hard to make productive. Our correspondent does not say so, but from the manner in which he speaks of the *depth* of the soil on the

two portions of his five acre field, we presume he has ploughed the one part 2 inches, and the other 4 inches deep. We hardly know what to say he shall do to render it profitable to cultivate. But if the field was our own, we should not dream of putting it in *Clover* and *Timothy*—both plants requiring rich soils—until we had given it a heavy dressing of manure. A new soil, which, in "the best season," will only produce 7 or 8 bushels of corn to the acre, must need every thing. If our correspondent should continue in his determination, to seed it to *oats, clover* and *timothy*, we would advise him before he does so, to compost 100 double-horse-cart loads of woods-mould and leaves, pine shatters, marsh mud, and kindred substances, with 100 loads of barn-yard and stable manure, and 250 or 300 bushels of ashes, put the compost into bulk, and let it remain until he is ready to plough, then to shovel it well together, spread the whole on his field, plough it in 6 inches deep, harrow the whole two or three times, then roll, cross plough, and harrow until he obtains a fine tilth. He should then sow his oats, harrow them in lengthwise and crosswise, and next sow his clover and timothy seed, separately, when he should sow a bushel of plaster per acre on his field, roll the clover and timothy seed in. Inauspicious as is his soil, we think that such a dressing would seure a good crop of oats, and good clover and timothy crops afterwards. Next fall, he should give his field a dressing of 25 bushels of lime per acre, to be followed the succeeding spring with a dressing of a bushel of plaster per acre, which last operation, should be repeated each spring so long as the field may remain in clover and grass; and it should so remain, whilever its product renders it an object. If our friend intends it as a *pasture*, we would recommend to him, to combine the following grasses with clover—*Timothy, Orchard grass and Kentucky Blue grass.* The proportions, *per acre*, should be as follows:—

Clover seed, 10 lbs.,
Timothy seed, 1 peck,
Orchard grass seed 1 bushel—to be moistened and mixed with ashes,
Kentucky Blue-grass-seed, ½ bushel.

This mixture would ensure a good pasture the season through—a thing which cannot be realized from clover and timothy alone. But our sense of the obligations of frankness and candor induce us to tell him, that without the heavy manuring—without the ashing and liming—which we recommend, it will be futile to expect a luxuriant "pasture" to be produced on the soil he describes—as the clover and grasses require food, which they could not find in his soil,—with these aids, he may anticipate a good one—a luxuriant one. If his soil is *wet*, he should *under-drain* it at least three feet deep—that operation would do more to change its texture than anything else, and render the ploughing and working much easier, when his stumps shall have rotted sufficiently, to bear the process of uprooting, and he may plough up his field again.

His *pasture*, when once set in clover and grass, should be top dressed, every second fall, with 5 loads of well-rotted manure, mixed with 1 bushel of salt per acre. This mixture should be harrowed in, and the ground rolled.

If our correspondent can avail himself of *charcoal*, 10 bushels per acre, *finely pulverized*, applied as a top-dressing, will greatly assist such land as he describes. It will not only act in the way we state on pages 262 and 263, but impart warmth to his soil, a property it greatly needs.

Guano for Spring Crops—Salts—Bones.

Balt. Co. January 11, 1852.

To the Editor of the American Farmer—

Dear Sir:—Your correspondent P. H. asks "if Guano be sowed broadcast on corn land, and ploughed in before planting, will the corn consume it, or leave enough to be available for the wheat crops to come after it?" In the spring of 1850 I ploughed in Guano at the rate of 400 lbs. per acre for corn, on red land of fair quality, which was well limed about 3 years before that time—the Guano was No. 1, Peruvian, and 1 bushel of Plaster mixed with every 400 lbs.—ploughed in deep, and the corn well worked—the corn was planted early, and was considerably injured by a drought of two or three weeks, just as it was tasseling—up to this time however, there was as fine prospect of a good crop as any man would wish to see—The terrible storm which visited us in July, tore it to pieces, and scattered it in every direction—I did not get over six barrels per acre—The corn was cut and shocked, and the ground put in wheat, early in the fall—part of the field was dressed with bones, at the rate of 12 bushels per acre—part with Chappell's Salts, 2½ bbls. per acre, and the remainder received no manure, other than the Guano which was applied in the spring—as far as the bones reached, the wheat was excellent—on the part dressed with "Salts" not quite so heavy, and the remainder of the field *very poor*, so light, that I could not believe it had any help from the Guano—I had supposed, that so heavy a dressing of Guano would have insured me a good crop of corn, and wheat, and a fine start for clover, and the bones and "Salts" would have brought on the clover crop finely—the drought of last summer killed a great deal of the clover, but it appeared to stand much better where the "Salts" was sown, than on the boned portion of the field—I have used Guano for some five years, for both fall and spring crops, and have nearly made up my mind not to use it for the latter, as I have failed to receive any benefit from its use in the spring.

I have several fine healthy looking nectarine trees, which bear very full every season, but the fruit invariably falls off, or rots on the trees, so that we cannot get one ripe specimen—some of them are stung by the "curculio," but the greater part rot and shrivel up on the trees, where they hang all winter—I have tried thinning and pruning, but to no good purpose—Can you or any of your correspondents tell me how to cure them?

Yours very respectfully,
Wm. Gambrill.

F. D. Benteen & Co. 181 Baltimore st., Balto.

HAVE FOR SALE a large assortment of MUSIC, and are constantly publishing and adding to their stock all the new and standard publications of the day.

Having rented an additional ware-room for PIANO FORTES, a very large assortment will always be kept for sale, from the best factories in the country, of 6, 6 1-3, 6¾, 6 3 4 and 7 octaves, in rosewood cases, with full metalic frames, from the plainest to the most costly. Among the assortment will always be found the celebrated Pianos of Chickering, Boston, and Nunns & Clark, N. York, both of which makers received gold medals at the World's Fair in London. Also, Prince & Co's. Organ Melodeons, intended to supply the place of an Organ in small churches, Seminaries, family worship, &c. Prices $45 and $75.

☞ Orders from the country for Pianos, Guitars, Music or any article in our line of business, will be as fully and faithfully executed as if the parties were personally present.

A liberal discount made to Dealers, Seminaries, Professors, &c. feb. 1 6t

Hussey's Reaping and Mowing Machine.

THE SUBSCRIBER will continue to manufacture his Machines as usual in Baltimore. Important improvement will be added this year. Its universal high character in this country has been confirmed by its late triumphant success in England.

The following is from the London Times, of Oct. 7th.

"A trial has taken place before the Cleveland Agricultural Society, of the respective merits of M'Cormick's and Hussey's American Reaping Machines, and the report of the Jury of practical men, appointed by the consent of both parties to decide this question of merit, is favorable to the latter implement. *This decision throws considerable doubt upon the justice of the award of a Great Medal, at the Exhibition to M'Cormick's.*"

The Jury at Cleveland unanimously decided that Hussey's Machine cut the corn in the best manner, especially in the direction of the lean - that it caused the least waste—that it did the most work in a given time—that it left the cut corn in the best order for gathering and binding—that it was best adapted to ridge and furrow, and was the least liable to get out of order. It was subsequently tried at Windsor, in presence of Prince Albert, who ordered two machines, one for Windsor and one for Isle of Wight, a strong commentary on the premature award of the great medal by an Institution of which he was the head.

The following is Prince Albert's certificate.

WINDSOR CASTLE, Nov. 13, 1851.

SIR:—In answer to your letter addressed to Gen. Wemyss, I have received the commands of his Royal Highness Prince Albert, to say, that so far as he could judge of Mr. Hussey's Reaping Machine, from its performance in the high fern at Windsor Park, his Royal Highness is disposed to form a very favorable opinion of it, and has ordered one* in consequence for the use of his own farm. His Royal Highness can however give no opinion as to the relative merits of this machine in comparison with those of others which he has not seen at work. I have the honor to be sir, your ob't serv't,

GREY.

*The Prince ordered two Machines, one for Windsor and one for Isle of Wight.

The following is the language of one of the Jury who gave the Medal to M'Cormick. An English paper says—At the table at Barnard Castle, Mr. Thompson proposed the health of Mr. Hussey with great fervour, and spoke of the great disadvantages under which Mr. Hussey's Machine had labored when tried against M'Cormick's for the great exhibition Medal; Mr. Hussey not being in the country at that time, and no one being present who understood the adjusting and working of the implement. Mr. Thompson said he was now thoroughly satisfied of its great merit, that he would do his best to get a medal for it.

Price of Mowing and Reaping Machines, -	$125
Price of Reaping Machine, - - - -	115
Price of Front Wheels, - - - - -	20
Platforms for side delivery, - - - -	5

feb. 1-tf.

Important to Farmers and Machine Makers.

THE subscriber respectfully informs the public that he has lately completed a TRIPLE REACTING INTERNAL GEARED HORSE POWER, which outrivals any in use.—It is made entirely of Iron, both Frame and Gearing. The Journals are made of Cast-Steel—its weight is 600 lbs. On trial it has proved itself capable of performing from 50 to 100 per cent. more work than other Powers with the same labor of the team. It is warranted to hold 8 horses.

I have also completed a combined THRESHER AND CLEANER, which is capable of Threshing and Cleaning from 300 to 500 bushels of wheat per day, with from 6 to 8 Horses and an equal number of hands.—4 horses can thresh with it from 100 to 200 bushels per day of wheat, and 400 to 500 of oats. It is very convenient for those who follow Threshing, and for two or more farmers to own in company, it is more convenient to move than any machine in use. The Machine stands on the wagon while threshing—the Power is loaded on the same wagon in moving—two horses are sufficient to move it; it will save enough labor in threshing 2000 bushels to pay its extra cost. It will thresh in a field or by a stack as conveniently as in a barn. The cylinder and concave can readily be adjusted so as to thresh with equal facility both tough and dry grain.—it is free from the complication and liability to get out of order of other machines of the kind, and of less cost.

Machine makers supplied on the most reasonable terms. Powers made by wholesale by I. W. Groff, Lancaster, Pa.—Threshers, Machines, &c. made and for sale by Jeffrey Smedley, Columbia, Pa.

All orders directed to the subscriber at Lancaster, Pa., will be promptly attended to. SAMUEL FELTON, Jr.

Also for sale by E. Whitman, Jr. & Co., Baltimore. jy.1-1y

Horner's Prepared Animal Manure.

THE subscriber asks the attention of the farming community to the following analysis by Dr. Jas. Higgins, State Chemist, and comparison between his prepared Animal Manure, and Patagonian and Peruvian Guano. It is necessary for a full understanding of the comparison, to state, that his Compound costs but 35 cts. per bushel, or $12 per ton.—This preparation has been used with much success on the tobacco crop, and testimonials from Mr. Reynolds, Mr. R. H. Hare, Col. Bowie, and other well known planters and farmers, who have purchased it for Corn, Wheat, Tobacco, and spring crops generally, can be produced as to its efficiency, by practical tests.

For further particulars, see advertisement in another part of this paper. dec. 1 JOSHUA HORNER.

LEONARDTOWN, Oct. 7th, 1851.

TO MR. J. HORNER, Baltimore—*Dear Sir:*—Below I send you a statement of your Manure as to its essential valuable constituents, and the relation which it bears to Patagonian Guano. A ton of your manure contains of

Ammonia,	54 34-100	pounds
Phosphate of Lime,	528	do

The average of Patagonian Guano by the ton, as it is sold, contains of

Ammonia,	60	pounds
Phosphate of Lime,	800	do

Estimating Patagonian Guano and your Manure by the same rule as to the value of the several constituents, the Patagonian Guano would be worth $19.20 per ton, and your Manure $14.44. If Patagonian, therefore, be worth $38 per ton, your Manure is worth about $28.50 per ton.

THE VALUE OF PATAGONIAN GUANO AND YOUR MANURE, I DETERMINE BY THE AGGREGATE VALUE OF THEIR SEVERAL VALUABLE CONSTITUENTS, and *by the same rule* which would make Peruvian Guano worth $46 per ton. Your Manure also contains 122 pounds of Gypsum, 114 pounds of Salts of Potash and Soda, and 300 pounds of Lime to the ton, being about equal to Patagonian Guano, of average quality, in these constituents. Very truly yours, &c.,

JAMES HIGGINS, St. Ag. Chemist.

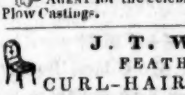
P. S.—You can make what use you please of this.

AGRICULTURAL IMPLEMENTS.—LABOR SAVING MACHINERY.—*GEORGE PAGE*, Machinist & Manufacturer, Baltimore st. West of Schroeder st. Baltimore, is now prepared to supply Agriculturists and all others in want of Agricultural and Labor-saving MACHINERY, with any thing in his line. He can furnish Portable Saw Mills to go by steam, horse or water power; Lumber Wheels; Horse Powers of various sizes, ranging in price from $85 to $200, and each simple, strong and powerful. His *Horse Power & Thrashing Machine*, he is prepared to supply at the low price of $125 complete; the Thrashing Machines without the horse power, according to size, at $30, 40, 65 and $75; Improved Seed and Corn Planter; Portable Tobacco Press; Portable Grist Mills complete, $165

4000 TONS PERUVIAN GOVERNMENT GUANO on hand, and to arrive.—500 tons PATAGONIAN—for sale by S. FENBY & BRO.

Corner of Gay and Pratt streets, Baltimore.

S. Fenby & Bro. are now prepared to make contracts for further delivery for Fall seeding, and having arranged for their supply of Guano arriving early in the season, purchasers can rely on not being disappointed. A large amount of Guano intended for the Fall crop will not arrive in the United States until late in the autumn. jy-1.



A. G. MOTT,
AGRICULTURAL IMPLEMENT MANUFACTURER,
No. 38 *Essex street*, near the Relair Market, Baltimore. Plows, Cultivators, Harrows, Wheat Fans, Straw Cutters, Grain Cradles, and all of the best and most approved Agricultural Implements in use.

☞ AGENT for the celebrated N. York Wiley and Empire Plow Castings. mar!

J. T. WATKINS,
FEATHER BEDS,
CURL-HAIR MATTRESSES,
FURNITURE AND VARIETY STORE, &c.
No. 47 South street,
Between Lombard and Pratt street,
Ap. 1-1yr *BALTIMORE.*

OSAGE ORANGE SEED—Saved with great care, and received direct from the region where it is grown, of reliable quality, for sale by L. S. HOYT,
Dec. 1-3t 55 Water street, New York.

PREMIUM IMPLEMENTS,

(At State, not County Fairs.)

The *MD. STATE AGRICULTURAL SOCIETY*
AWARDED E. WHITMAN & CO.
The following PREMIUMS at the Great Show, October, 1851.

For the *Largest* and *Best Display* of Useful and Valuable Agricultural Implements,	$30 00
For the best Plow,	5 00
" " Farm Wagon,	8 00
" " Wagon Harness,	4 00
" " Horse Cart,	5 00
" " Cart Gear,	4 00
" " Cornsheller,	4 00
" " Corn and Cob Crusher,	5 00
" " Churn,	4 00
" " Portable Smith's Forge,	6 00
" " Chain Pump,	2 00
" " Hay Press,	25 00
" " Hydraulic Ram,	3 00
" " Drain Tile,	2 00
" " Hog Trough,	3 00
Premiums in Plowing Match,	14 00
	$124 00

Also, *Certificates of Pre-eminence* for their *Wrought Iron Rail-way Horse Power, and Wheat Fan*, (Bamborough's) being the Society's Highest Honors, they having taken the First Premiums last year.

☞ The above result shows conclusively that their Implements are regarded as being the Best and most valuable—the amount in Premiums being about three times as great as that of any other exhibitor.

MORE PREMIUMS!

The Pennsylvania State Agricultural Society
AWARDED E. WHITMAN & CO.
The following Premiums, October, 1851, viz:

For the best Hay Press,	$20 00
" " Sweep Horse Power,	10 00
" " Reaping Machine,	10 00
For the Largest and Best Display of Agricultural Implements,	20 00

Also, Diplomas for Best Plows and Straw Cutters.

The Maryland Institute for the Promotion of the Mechanic Arts, at their Great Fair held in Baltimore during the months of October and November, 1851, awarded the following Premiums to E. Warman & Co.—viz:
For their Iron Cylinder Thrasher and Wheat Fans,
First Premium, a *Heavy Silver Medal.*

COUNTY FAIRS.

Several of these highly interesting and valuable exhibitions have been held in Maryland this season, at which premiums were awarded for such Agricultural Implements as were exhibited, and as the Premiums were small, there was in many cases little or no competition, therefore such articles as were exhibited received premiums.

Farmers and Planters who prefer purchasing Premium Implements, may well regard such awards as being "*exterior*," requiring their own judgment and experience to decide properly as to their relative merits. But at our STATE FAIR, which was said to be the LARGEST DISPLAY OF FARM IMPLEMENTS ever exhibited in the world, such Implements as received First Premiums there, may be received in a different light, and regarded to the *letter*, as evidence of their superiority. We publish no premiums received on our Implements at County Fairs this season. We regard premiums without competition as being of little value.

☞ Those who purchase the Premium Implements, would do well to ascertain, *if they can*, at what Fairs the Premiums were awarded, and regard them accordingly.

feb. 1 E. WHITMAN & CO.

AGRICULTURAL IMPLEMENTS.

THE LARGEST ASSORTMENT OF AGRICULTURAL IMPLEMENTS ever offered for sale in the United States, will be found at E. WHITMAN & Co's. Warehouses on Light street, Baltimore, Md. Dealers would do well to call and examine their stock before going further North, as the proprietors are determined to sell their goods on as favorable terms as any other house in this country.

It will be seen by reference to the reports of the Maryland and Pennsylvania Agricultural Societies, that this house received more than four times the amount in premiums of any other exhibitor, which is an evidence of the superiority of their manufactures. feb. 1

REAPING MACHINES.—McCormick's celebrated Reaping and Mowing Machines, which received the highest honors at the great World's Fair in 1851, for sale by
E. WHITMAN & CO.
feb. 1 55 Light street, Baltimore, Md.

1000 BAMBOROUGH'S Celebrated 51 PREMIUM WHEAT FANS—for sale by E. WHITMAN & CO.
feb. 1 55 Light street, Balto.

PREMIUM CHAIN PUMPS—For sale wholesale and retail by E. WHITMAN & CO.
feb. 1 55 Light street, Balto. Md.

PREMIUM HAY PRESSES, now in great demand, for sale by E. WHITMAN & Co.
feb. 1 55 Light street, Baltimore.

National Agricultural Warehouse,
Washington City.

THE undersigned is pleased to inform the Farming community that he has completed the arrangements of his new and extensive warehouse on Seventh street, a few doors north of Pennsylvania avenue, and has now on hand and will continue to keep an assortment of *Agricultural* and *Horticultural* MACHINERY and IMPLEMENTS, together with Field and Garden SEEDS of every variety, as complete and well selected as can be found in any similar establishment in the United States.

His arrangements with the best manufacturers known to the country are such as will enable him to sell at their prices, and all goods leaving his warehouse will be warranted to prove as represented.

He invites particular attention to his assortment of Plows, Cultivators and Harrows—among which may be found a variety of new patterns, peculiarly adapted to the wants of our farmers. Descriptive catalogues furnished upon application.

FITZHUGH COYLE,
feb. 1-2t 7th street, Washington City.

The Working Farmer,

A MONTHLY PERIODICAL, devoted to Agriculture, Horticulture, Floriculture, Kitchen Gardening, Management of Hot Houses, Green Houses, etc., embracing Agricultural Chemistry, Preparation of Manures, &c.

Edited by Professor James J. Mapes and published at 25 Cliff street, New York.

Terms per year, in advance, one copy, $1 00
" " " six copies, 5 00
" " " twenty-five, 20 00

Back Volumes, in covers, at subscription prices. The Fourth Volume will commence March 1st, 1852. feb. 1-4t

PERUVIAN GUANO.—The subscriber offers for sale five hundred tons Peruvian GUANO, of very superior quality, and warranted equal to any ever imported. This Guano is put up in heavy and well secured Osnaburg bags, which to the farmer is an important consideration.

Agricultural Clubs and individual purchasers will be supplied upon as favorable terms as can be offered by any dealer in the United States. FITZHUGH COYLE,
National Agricultural Warehouse,
feb. 1-3t Seventh street, Washington City.

C. H. DRURY, *Hollingsworth street corner of Pratt—Head of the Basin*—having completed his establishment with Foundry connected, for the making his own Castings, is prepared to furnish all varieties of *AGRICULTURAL IMPLEMENTS* and *CASTINGS*, made to pattern of the best material.

The following is a list of PLOWS kept constantly on hand: Davis, of the different numbers, for wrought and cast shears, 2, 4 & M., Chenoweth, Wiley, 2 and 3 furrow, No. 0, Hill side, No. 1 and 3 Connecticut—Beach Improved or Posey Plow, with common Davis cast shear—Self-sharpener or wrought shear—Corn Cultivators, plain and expanding—Tobacco do.—Wheat Fans—Corn sheilers with double hopper—Old Vertical and Virginia sheller—Harrows—superior Pennsylvania made Grain Cradles—Revolving Horse Rakes—Cylindrical straw Cutters, &c. &c. Horse Power *GRIST MILLS*, a very useful and saving article, and coming into general use. *HORSE POWER AND THRESHING MACHINES*, of these I need not say any thing, as wherever they have been in use any time, they are preferred to all others.

C. H. D. will this year make a smaller size Power & Thresher, (price of Power, $100, Thresher, $50, Band, $10, or when taken together, complete, $150 cash.) Persons in want of implements made of the best material, and put together in the strongest and best manner to answer the purpose for which they are intended, are invited to call on the subscriber. jel

Bone Dust and Poudrette.

BY the request of my customers, I have made considerable improvement in the machinery for GRINDING BONE, and am now prepared to furnish a fine article, which acts quicker and more powerfully, as I extract no glue from the Bone, or use any Chemicals, leaving the Bone Dust in its natural or pure state, weighing from 55 to 60 lbs. per bushel. The Poudrette is as good as can be made, and will be sold low. Apply by letter, or at the Factory on Harris' Creek, Baltimore, Maryland. THOS. BAYNES.

REFERENCE.

D. M. Perine,	Lloyd Norris,	Wm. Baker Dorsey,
G. W. Lurman,	W. H. Stephenson,	W. H. Ross,
J. G. Hughlett,	J. W. Randolph,	Capt. C. Wright,
J. Tyson, Jr.,	T. Jef. Rush.	Wm. S. Bond.

N. B. Orders left with the Office of the Farmer will be attended to.

☞ In December and January, I will sell my Bone Dust at 50 cts. per bushel. Oct. 1.

Caveat Entered Dec. 20th, 1851.

TO MAKE 2 OR 3 BUSHELS WHEAT AND CORN GROW, where but one grew before, and to Fatten 2 or 3 Cattle and Sheep instead of one, are objects to interest all. Farmers, Feeders and Machinists are requested to call at No. 95 LIGHT ST. WHARF, where the plan will be demonstrated, and a Machine to facilitate the operation can be seen and purchased from a

feb. 1 PRACTICAL FARMER.

GARDEN AND FIELD SEEDS—Grown and imported by
R. SINCLAIR, Jr. & Co. Baltimore.

Our assortment of Garden Seeds is unusually large, and generally grown from *superior stocks*.—Also on hand, English and American LAWN GRASS SEED, Field Grasses, Mangle Wurtzel, Sugar Beet, &c. feb. 1 R. S. Jr. & Co.

The Thorough Bred Stallion "Beverly" For Sale.

HE is a fine brown bay, five years old next spring, full sixteen hands high, of fine points and form for action and durability; he was the premium three years old colt at the Maryland State Fair for 1850, (Baltimore.)

PEDIGREE.

His sire Antrobus by Imported Priam, out of Aurora; his dam Ellen Hooe, by Imported Margrave, out of Lady Culpeper by Carolinian, (son of Sir Archy) out of a full sister of those celebrated horses Defiance and Revenge, by the renowned Florizel, one of the best sons of Diomed. As it is enough to say that Beverly is from Imp. Priam, on his sire's side, and Imp. Margrave on the dam side, the residue of his pedigree being unquestionable, persons wishing to buy a very superior thorough bred Stallion, are referred to the vols. of the American Turf Register for the pedigree, ancestry and family of Antrobus' dam "Aurora," (of the stud of Wm. H. Taylor, Esq. of Mount Airy, Virginia,) and for that of Lady Culpeper, the dam of Ellen Horr; and they will be satisfied that Beverly combines in his pedigree, and the performances of his family, as much promise for size, strength, action and durability, as any young stallion in the Union. Owning his dam, and others very near akin to him, I will take six hundred dollars for him, and avoid the too much "breeding in and in." H. G. S. KEY.

Leonard Town, Md., Dec. 10th, 1851. jan. 1

A Farm For Sale.

WILL positively be sold if immediately applied for, one of the very best FARMS in Baltimore county. It contains 278 acres, 50 of which are in wood, the balance in arable land. There is an apple orchard of 300 trees in full bearing, and is considered the best orchard in the county. Also, a large peach orchard of the choicest fruit in full bearing, as well as cherries, pears and quinces. A large part of the land is set in clover and timothy. The land is of the very best quality, and the yield of the Farm has never been surpassed by any in the neighborhood. It is situated near the Frederick Turnpike, 7 miles from Baltimore, and 1¼ miles from Catonsville, with fine society, churches, and schools, and adjoins the farms of John Glenn, G. W. Lurman, George Reinicker and Edw'd T. Elliott, Esqrs. The improvements are a very pretty and substantial STONE DWELLING HOUSE, 40 by 38 feet, with vestibule front, and a back building 30 feet, in which are kitchen and pantries. There are four rooms on a floor in the main building, besides the passages. The house is quite new, having just been finished, and has been much admired; it is built in the Gothic style, and is of the very best finish. Also, a large new Barn and Stabling, just finished, 60 by 60 feet, and very complete; a good large two story frame house for Manager, and a good out house for hands. Those wishing to purchase will please call on the undersigned, who will take pleasure in showing the Farm. Terms will be made accommodating. Apply to me on the Farm; or, if by letter, postpaid and directed to CATONSVILLE, Baltimore Co. Md.

jan. 1 FRANCIS S. KEY.

LIME.

THE subscribers are prepared to furnish Building and Agricultural Lime at the depot on the Back Basin, corner of Eden and Lancaster-sts., which they will warrant to give satisfaction, it being burnt from pure Alum Lime Stone, equal to any found in the United States. Orders may be left with WILLIAM ROBINSON, No. 15 Hollingsworth-street near Pratt.

tf **FELL & ROBINSON, City Block.**

Agricultural Implements and Machinery

Suited to all the Southern States,

FARMERS, PLANTERS AND MERCHANTS

WILL FIND AT THE

AGRICULTURAL WAREHOUSE

OF

A. B. ALLEN & Co.

189 and 191 Water street, New York,

The largest assortment in the United States, of tools and machines, suited to southern culture. Most of the implements sold by them, are manufactured in their own machine shop, under the direct supervision of one of the firm, where the best of seasoned timber only is used, with iron of the first quality.

PLOWS.

Of Plows, they sell more than 100 different patterns, among which are double moldboard, or fluke plows, self-sharpening, subsoil, and side-hill plows.

PLOW CASTINGS,

of various patterns, among which are bull tongue, scooter, scrapers and shovels, by the ton or retail.

Harrows, Cultivators, Cotton Sweeps, Corn Planters, Hoes, Shovels, Spades, and Forks, of various patters, in any quantity.

STRAW CUTTERS AND CORN SHELLERS,

Manufactured expressly for southern use, extra strong.

Sugar Mills, Rice Hullers, Cotton Gins, Threshing Machines, for wheat and oats, and rice; Fanning Mills for do. Wheat and Corn Mills, with Burr Stones or Iron Plate.

HORSE POWERS

Of various patterns, suitable for one to Eight horses.

Sowing, Mowing, and Reaping Machines, Grain Cradles, and Scythes and Rakes, and every kind of Horticultural Tools; also, Garden and FIELD SEEDS, Fruit and Ornamental Trees, sent to order; also, improved cattle, sheep and swine.

A descriptive, pictorial CATALOGUE of over 100 pages, will be given, on application from customers, or sent to them by mail on their enclosing four letter stamps, to pre-pay postage, as required by the present post office law.

THE PLOW,

A MONTHLY PLANTERS' AND FARMERS' JOURNAL,

EDITED BY

SOLON ROBINSON,

Is now published in place of the American Agriculturist, at

FIFTY CENTS A YEAR.

Editor's office at the New York Agricultural Warehouse.—Specimen numbers will be forwarded, on application, to our correspondents. A. B. ALLEN & Co.

ja. 1-2t* 189 and 191 Water street, N. Y.

To Farmers.

ENGLISH VITRIFIED SOCKETED DRAIN PIPES, composed of the Hardest Clays known in Europe, forming, when combined, a strength equal to Iron, and vitrified to a surface of glass and entirely proof against all corroding agents. They are in lengths of two feet, and from 2 to 24 inches diameter, with single and double junctions, &c. to match. The tests to which these and other Pipes have been subjected, have proved these to be the only drain pipes that can be relied on for strength and durability under ground.—The prices have been materially reduced, and a new supply is daily expected per ship June Henderson, from Liverpool, and is offered for sale in lots to suit, by the sole importers for this city, THOMPSON & OUDESLUYS,

57 South Gay street.

Who also offer for sale,

African and Mexican GUANO, in barrels, at $25 per ton 2000 lbs.; Wood's New York Bone Manure, in barrels, at 1½ cts. per lb.

☞ Analyses of the Guanos can be seen at our store.

Jan. 1-3t

Calystegia Pubescens—New Hardy Climber.

THE new and elegant climber, recently introduced from China by Mr. Fortune, proves perfectly hardy in New England, having stood in the grounds here for two winters without protection. Trained to a single pillar, any ten feet in height, it is a very striking and beautiful object from June till cold weather, during which time it is covered with a profusion of its large double flowers of a delicate rose color. It is very ornamental planted in patches like Verbenas; makes an admirable screen—and is very effective in young plantations, belts or shrubberies, trailing prettily on the surface, and running among the lower branches of the trees in a very picturesque manner. Its culture is very simple, and it will thrive in common garden soil. If required in considerable quantities, the tubers may be divided into single eyes, planting each in a four inch pot of good light compost, in February, under glass, or in hot beds in the spring; or large pieces containing several eyes may be planted in the open ground in May.—Plants, $3 per dozen. Tubers for 100 plants, $3, which may be sent by mail or express, to order.

Also every description of Fruit and ornamental Trees and Shrubs, Strawberries, Dahlias, Roses, Verbenas, Chrysanthemums, &c., *with every new variety of the present season.* Stocks for Nurserymen and Amateurs, both Fruit and ornamental, of every description. *Pear Seed* of first rate quality.

Address B. M. WATSON, Plymouth, Mass.

Carriage paid to Boston.—Catalogues sent post paid, on application. Oct. 1-3t

JOHN FEAST, Florist and Seedsman,

279 Lexington street, Baltimore,

OFFERS an extensive collection of Hardy Trees, Shrubs and Evergreens, as Auricarias, Deodora Cedars, Norway Spruce, Cypresses, Balm Gilead, Yews, Hollies, Cryptomes, Roses of all the fine-t varieties; Dahlias, Geraniums, and the choicest Camellias; Grape Vines, with an extens ve collection of Greenhouse Plants, including the most rare.

Also, Garden and Flower Seeds, with almost every thing in his line, on the most liberal terms and lowest rates. Boquets and Cut Flowers furnished in the best style.

Experienced Gardeners recommended by applying, post paid. nov. 1-6t

WILLIAM HARRIS, GUN, RIFLE AND PISTOL MANUFACTURER, No. 65 *South st.* Baltimore, Keeps constantly on hand a large assortment of Bird and Ducking Guns, (double and single barrelled.) *All Guns warranted to shoot correctly.* Also, Pistols of every style and finish, such as Revolvers, Self-cocking Rifle Barrel. Rifles of very superior quality at reduced prices. My stock comprises every article in the sportsman's line. Diamond grain Powder; Dupont's and Beatty's Powder; Revolving Pistol Percussion Caps; Military Percussion Caps, for muskets and U. S. pistols. Guns Stocked and Repairing done with neatness and despatch. Persons desiring to purchase any article in the above line, would do well to give me a call. sept. 1-6t

LIME—LIME.

THE undersigned having purchased of E. J. Cooper the most extensive Lime Burning Establishment in the State, is now prepared to supply Agricultural and Building LIME, of superior quality, to farmers and others, on accommodating terms, from his Yard, at the *City Block*, or delivered at the several landings on the Chesapeake Bay and its tributaries, and pledges himself by strict attention and punctuality, and a determination to do justice, to merit a liberal share of patronage. Any orders addressed to him through the Baltimore Post Office, or left with C. W. BURGESS & Co., No. 60 South street, one door above Pratt, will be promptly attended to.

Feb. 1-1y* JAMES L. SUTTON.

JAMES BAYNES, Wool Dealer,

Warehouse No. 105 *Lombard st. near Calvert, Balto.*

IS prepared at all times to give a fair market price for WOOL of all descriptions. He would recommend to farmers to be more particular in washing their Wool, and in getting it in good order before bringing it to market, to ensure them a fair price. The demand is good, and the probability is, that it will continue so the coming season. Those having wool to dispose of, are invited to give him a call before disposing of their fleeces. Any information as to putting it up for market, &c. will be freely given.

References—B. Deford & Co., and Wethered Brothers, Baltimore—Jas. Mott & Co., and Houston & Robinson, Philadelphia. Ap. 1-1yr

F. B. DIDIER. T. TENANT DIDIER.

Maryland Agricultural Warehouse.

F. B. DIDIER & BRO.

(Successors to Hambleton & Didier,)

No. 97 NORTH PACA ST., NEAR FRANKLIN.

PARTICULAR ATTENTION.—The late annual Fair and Cattle Show of 1851, has again honored the Plow, which in their estimation merited a premium, viz: the celebrated Moore and Chamberlain Plow, better known as the Delaware. The undersigned have constantly on hand the above valuable Plow, together with others which received the Society's highest honors; the celebrated Thermometer Churn, which also received a premium, Corn Shellers, Cultivators, &c.

N. B. U. B. Rodgers' celebrated Steel extending Point and Share Plow, together with a new subsoil, on hand. to whose notice we respectfully invite the farming community.

N. B. We are agents here for the sale of Miller's celebrated Fruit and Ornamental Trees, the character of which needs no comment here. Catalogues for the same can be procured gratis, by calling on us in person or addressing us through mail.

F. B. DIDIER & BRO.

We are also agents for the sale of the Horseman's Hope, and Farmers Friend, a healing balm, which we guarantee to cure all diseases horses are heir to.

James Hungan's justly celebrated Genesee Fanning Mill, which requires only one-half the power necessary to operate other mills, and in cleaning has not its equal; for sale by us, the sole agents in Maryland.

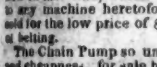
Easton Fair, Talbot Co., Md., Nov. 15th, 1851, awarded us the first premium for our Steel Extending Point Subsoil Plow; also for Ox Yokes and Hames.

Farmers who think of purchasing Horse Powers and Thrashers, would do well to give us a call, having something new in this line, which we warrant in every point superior to any machine heretofore brought before the public, and sold for the low price of $110, complete, with the exception of belting.

The Chain Pump so universally admired for its simplicity and cheapness, for sale by us at the rate of 50 cts. per foot beneath ground and $3.50 for the necessary fixtures above; thus a well 20 feet deep would cost $13.50.

N. B.—We have in store Baugher & Frey's celebrated Vertical Sheller, warranted to shell 100 bus. per hour—price $30; Straw Cutters, all of the most improved and approved kinds, of our own and of Eastern manufacture—prices varying from $7 and upwards—the first price box will cut from 2 to 3 bus. per minute, large size Cutters in proportion; Corn and Cob Crushers, Wheat Fans, Wheat Drills, Corn Planters, Tschudy Grain Mill, which we unhesitatingly pronounce the best Mill in use—we respectfully invite an examination before purchasing elsewhere; Chain Pumps, Water Rams, Patent Ladders, &c. &c. 1

F. B. DIDIER & BRO.



C. B. ROGERS' Seed and Agricultural WAREHOUSE,

No. 29 Market st. Philadelphia,

HAS constantly on hand and is manufacturing all the most approved Implements of Agriculture. Dealer in Imported and American Grass and Garden SEEDS, of his own raising. Fruit and Ornamental Shade TREES.

Also, Guano, Poudrette, Bone Dust, Native Phosphate of Lime, Soda, Salt, Chemical Residuums, and the most approved Chemical *FERTILIZERS.*

In addition to the great variety kept in Agricultural stores, he has a number of new and valuable articles, he is the inventor and the only manufacturer of—among which is Rogers' Cast-steel extending point Self-sharpening PLOWS, which is yet unequalled; twelve different kinds of CULTIVATORS, adapted to every different kind of cultivation and seeding, which only wants to be seen to be appreciated; Revolving Clover Seed *COLLECTORS*; improved horse and hand power Thrashers, Planters and Corn Shellers. All of which will be sold on the lowest terms, by

sept. 1-tf C. B. ROGERS, No. 29 Market street.

GUANO—GUANO.

500 TONS PERUVIAN GUANO, direct importation, and *warranted equal in quality* to any in the market. The Guano is put up in good strong bags, and is in fine shipping order. For sale in lots to suit purchasers, at the lowest market rates, by

WM. ROBINSON, No. 4 Hollingsworth st. near Pratt st. wharf, Baltimore, Md.

Also, PATAGONIA GUANO, BONE DUST, Building and Agricultural LIME, for sale on the best terms. ja. 1-tf

CORNSHELLERS—*Improved Single and Double Spout*—excellent—$10 to 16.

Vertical Plate or Negro's Own Cornsheller, $16.

Virginia or Cylindrical, capacity 800 bushels per day, made for both Horse and hand power—price $30.

Ditto of *greater capacity*, for Horse-power—$40 to $80. For sale by

feb. 1 R. SINCLAIR, Jr. & Co. Baltimore.

COMPOSITION PLOW POINTS—No article of our stock has so *decreased the expense of farming* as the *Cast Iron Point or Shear*, and to render this article yet *more valuable*, they are now composed of a *series of metals*, rendering the edges of *double the durability* of ordinary plow points. For sale by the ton or hundred, EXCLUSIVELY by

feb. 1 R. SINCLAIR, Jr. & Co. Baltimore.

HORTICULTURAL TOOL CHESTS—In which are contained a complete set of GARDEN TOOLS of extra finish—price $15 to 25.

Also, GENTLEMEN'S TOOL CHESTS, fitted with a complete sett of extra finished CARPENTER'S TOOLS. For sale by R. SINCLAIR, Jr & Co.

feb. 1 Baltimore.

DOMESTIC GRIST MILL—(*Every planter his own miller!*)—with the power of 4 horses or 6 mules, four to five bushels fine meal may be ground by these mills per hour. For sale and warranted by R. SINCLAIR, Jr. & Co.

feb. 1 Baltimore.

CORN AND COB CRUSHERS—SINCLAIR & Co's. PATTERN—reducing both in fine order for feeding stock—price $30. For sale by

feb. 1 R. SINCLAIR, Jr. & Co. Baltimore.

PLOWS—FOR FLUSHING AND CULTIVATION—A large and general assortment. For sale by

feb. 1 R. SINCLAIR, Jr. & Co. Baltimore.

HAND POWER STRAW AND HAY CUTTERS—price $5 to $18. For sale by

feb. 1 R. SINCLAIR, Jr. & Co. Balto.

FIELD SEEDS—Just received—

250 bushels prime new Clover Seed, free from ripple.
100 do do Timothy do.
100 do do Orchard Grass Seed.
75 do do Herds do.

For sale by FITZHUGH COYLE,
National Agricultural Warehouse,
feb. 1-2t 7th street, Washington City.

GUANO---GUANO.

THE subscribers have now in store supplies of Peruvian and Patagonian GUANO, which they will sell in lots to suit at the very lowest market rates.

They are expecting further arrivals of Peruvian about 1st August, and also about 1st September, and are now prepared to contract with farmers for their fall supplies, deliverable from ship at those periods—thus saving the purchaser a heavy charge for transportation.

Ground PLASTER in barrels.
GROUND BONE, pure.
Clover and Timothy SEED.
KETTLEWELL'S RENOVATOR.
Reynolds' CORN SHELLERS.
FISH, BACON, TAR and SALT.

jy. 1 W. WHITELOCK & CO. cor. Gay and High sts.

BOOKBINDING.

WILLIAM C. LYCETT, No. 125 BALTIMORE-ST.,

Opposite the American Farmer office,

WILL execute all orders in the above business with promptness, in a neat and substantial manner, and in every variety of style, in full or half bound Tur. Morocco, Russia, Calf, Sheep or Muslin at the lowest possible rates, such as Bibles, Magazines, Music and old Books carefully mended or re-bound. Feb. 1 only

CYLINDRICAL STRAW AND FODDER CUTTERS—*(the most durable and effectual)*—four sizes, and adapted for either horse or manual powers. For sale by

feb. 1 R. SINCLAIR, Jr. & Co. Balto.

2000 Acres of Roanoke Land For Sale.

THE subscriber having a much larger quantity of land than he can cultivate, and wishing to have some neighbors who may be disposed, like himself, towards agricultural improvement, would sell upon advantageous terms, from 1 to 2000 acres of the well known land of Roanoke River. This quantity would make two good plantations, and might be so divided. To those who may not be acquainted with Roanoke lands, they may be described as being very similar to the *best* lands of the Upper James River—they consist, 1st, of fine chocolate colored "low grounds," admirably adapted for wheat, corn and clover, lie immediately on the River, and are from ¼ to 3-4 of a mile wide. These low grounds are all of pure alluvial soil for several *feet deep*, and are as near being inexhaustible as any lands *can* be. In rear of these are the "second low grounds" lands, very similar in color and general characteristics, but not so rich in alluvial deposite—they are equal to any lands in the U. States for wheat, clover and the grasses, 31 1-4 bushels per acre were measured on 100 acres after a loose gathering; they are also well suited for Cotton, 12 and 1500 lbs. per acre having been made on lands adjacent and every way similar to those of the subscriber, (who does not cultivate cotton.) The natural growth of these lands is composed of the Black Walnut, Tulip, Hickory, Ash, Oak, &c. Still further from the river, lie the "Uplands,"—these are greatly inferior to the low grounds, but produce corn and cotton well, and possessing a fine clay subsoil, when limed produce wheat and the grasses to advantage—their timber growth is Oak, Hickory, Dogwood, &c. The lands run up to within about 7 miles of the point where the Petersburg Railroad and the Norfolk Railroad cross each other; both are laid with heavy T iron, and afford a choice of markets. The river affords a navigation for 8 months of the year, and the subscriber has loaded a sea-going vessel with 6600 bushels of corn in one cargo.

A large portion of the land has been improved by Lime, Clover and Plaster.

There is a new Dwelling House with 8 rooms, new kitchen, new brick smoke house, 40 feet by 20, and a number of frame negro houses. Also, a very extensive Water Power, with a Mill 64x30 ft. running 2 sets of mill stones, a Wheat Thrasher, Chaffing Fan, Elevator, and all the requisite machinery for cleaning wheat; Corn and Cob Crusher, &c. Saw Mill, both circular and up and down saw, &c.

The fall diseases, which formerly so greatly injured the value of lands in this region of country, have for the past ten years almost *wholly* disappeared, and its healthfulness can now be fairly compared with any portion of the U. States, inflammatory diseases being almost unknown.

The price of the land is $12 per acre for the entire tract, with a payment of one-fourth in cash, the remainder in 2, 4, 6 and 8 years, if the security is satisfactory, with interest.—These lands are well known to Mr. Solon Robinson, a well known agriculturist, and to Mr. Obed Hussey of Baltimore—they will be shown by visiting the subscriber in the town of Jackson, N. C., 9 miles south of Garysburg, on the Petersburg and Roanoke Railroad. Apply also to Samuel Sands, Esq., Editor of the American Farmer, or by letter, to

feb. 1-tf H. K. BURGWYN, Jackson, N. C.

HUSSEY'S
Patent Reaping and Mowing Machine.

WITHOUT regard to the unrivalled success of Hussey's Reaper at the late London Exhibition, we have determined to add them to our stock of Implements. Their simplicity and strength of construction and manifest perfection of operation, must result in their general use. We have no hesitation in rating them among the most perfect agricultural machinery in our collection. For sale by

feb. 1 R. SINCLAIR, Jr. & Co. Balto.

Mexican Guano.

GUANO—700 tons Mexican Guano, in store and for sale by STIRLING & AHRENS, 54 Buchanan's wharf, at $25 per ton of 2240 lbs.

We have the following certificate from Dr. David Stewart, who analysed this Guano: "It contains the largest proportion of Phosphates I have ever met with—where they are deficient in a soil, this Guano is cheaper and much more permanent than the Peruvian. Signed,

feb. 1-2t DAVID STEWART."

POUDRETTE, &c.—Poudrette from the Lodi Factory at $1.75 per bbl.; Pulverized Animal Carbon at 1 and 1¼ cents per lb.; ditto Bituminous Coal at $1.25 and 1.75 per bbl. For sale by WILLIAM CHILD,

feb. 1-2t* No. 78 South street, Bowly's wharf.

CRANBERRY VINES—100,000 fine Plants suitable for transplanting, of the variety commonly raised and sold in New England, and abundant bearers. They can be packed and forwarded to any part of the Union. For sale by

feb. 1-1t* F. TROWBRIDGE, New Haven, Ct.

Marks' Daguerrean Gallery,

No. 159 BALTIMORE STREET, over Parr & Banks' China Store, and opposite Butcher's Confectionary,

WHERE the experience of years and the highest honors by the *Premiums* awarded to it by the *Maryland Institute* for successive years, confirm its superiority. All Pictures taken at this establishment warranted correct likenesses or you are not required to take them, and that at prices satisfactory. Particular attention paid to family groups and children. Views of Farms, Horses, Cattle, &c. taken at reasonable charges. Call at the Gallery and look at the specimens for yourselves. feb. 1-1yr.

Chappell's Fertilizer.

HAVING purchased the Factory know as "CHAPPELL'S SOUTH BALTIMORE CHEMICAL WORKS," and having on hand a large stock of crude materials for the manufacture of the above celebrated Renovator of poor or worn out lands, the undersigned is now prepared to sell the same, made in the most approved manner and of superior quality, in quantities to suit purchasers, at the usual place, No. 158 LOMBARD ST., between Hanover and Charles. Price $3 per barrel, warranted to contain 300 pounds. Terms, cash under $50, or 6 mos. for town acceptances on sums over $50. For certificates of the valuable effects of this Chemical Salts, I would refer to previous numbers of the "Farmer."

feb. 1 JOHN G. CHAPPELL.

Sandy Point For Sale at Auction.

THE undersigned, prevented by engagements requiring his undivided attention elsewhere, from residing on his farm, will sell publicly, (unless previously sold privately, of which due notice will be given) at the Bollingbrook Hotel, in Petersburg, (Va.) on WEDNESDAY, the 26th day of May next, at 11 o'clk A. M., without reserve or regard to weather, that valuable, highly-improved, and heavily-timbered estate, known as Sandy Point, situated on James River, in the county of Charles City, Virginia, 45 miles below the city of Richmond, and 32 below the city of Petersburg.

This fine body of land contains 4,453 acres, and has been advantageously divided into four well-located farms, with dwellings, commodious barns, &c., and into five valuable lots of timbered land exclusive of an ample allotment of wood and timber for each farm.

Persons desirous of investing in lands of a quality not often in market, are invited to examine this estate.

Printed bills, giving the quantities in the subdivisions, &c. will be furnished, and accurate plats exhibited to applicants.

Possession given of the timbered lands immediately after sale, of the farms, at the end of the year, with the privilege of fallowing and seeding wheat.

Terms: One-fifth cash; balance in five annual instalments for the farms. For the timbered lands one-third cash and three annual instalments; credit payments to bear interest and to be secured by deeds and approved endorsed negotiable notes or bonds. R. B. BOLLING,

Petersburg, Va. feb1-ts. PANNILL & SONS, Aucts.

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